#### PRINTED WIRING BOARD PARTS LIST KU9152 POWER UNIT PARTS LIST

Ref. No.	Part No.	Part Name	Remarks
SEMICOND	UCTORS	<u></u>	
IC101	2620298009	HD14001BP	
1C201	2630466009	NJM2068ADA	
IC301	2620874009	TLP521-1 (BL)	
IC601,602	2620679000	M5238P	
TR101	2740138007	2SD1944	
TR102,103	2730317003	2SC2458 (BL)	
TR104	2690026007	RN2202 (10k-10k)	
TR105	2730317003	2SC2458 (BL)	
TR106	2690026007	RN2202 (10k-10k)	
TR107,108	2730317003	2SC2458 (BL)	
TR109,110	2690025008	RN1202 (10k-10k)	
TR111	2710191003	2SA1048 (GR)	
TR112,113	2730317003	2SC2458 (BL)	
TR115	2730253015	2SC2878 (A/B)	
TR116	2690025008	RN1202 (10k-10k)	
TR201,202	2750055002	2SK184C (Y/GR/BL)	
TR203,204	2730235020	2SC1841 (E/F)	
TR205,206	2710202002	2SA1360 (O/Y)	
TR207	2710201003	2SA1321	
TR208	2730332094	2SC3334	
TR301	2730198002	2SC1815 (Y)	
TR304	2730199001	2SC2238 (Y)	
TR305	2710104003	2SA968 (Y)	
TR310	2730281003	2SC2705 (O)/(Y)	
TR311	2710131021	2SA988 (E/F)	
TR601	2690067008	RN1205 (2.2k-47k)	
TR602	2730235020	2SC1841 (E/F)	
D051	2760424005	4D4B42 (LC1)	
D101,102	2760427015	DSA1A2 (TYPE-3)	
D103,104	2760049011	1\$2076A	
D105	2760477010	HZS16-2	
D106	2760049011	1S2076A	
D107	2760432000	1SS270A	
D108,109	2760049011	1S2076A	
D110	2760465022	HZS7B-3	
D111	2790016001	SFOR1A42 (TPE 2)	
D112,113	2760432000 2760460001	1SS270A HZS5C-1	
D114 D115	2760432000	1SS270A	
D117,118	2760049011	1S2076A	
D117,110	2760049011	HZS3B-2	
D119,120	2760049011	1S2076A	
D201,202	2760477010	HZS16-2	
D201,202	2760432000	1SS270A	
D206	2760432000	1SS270A	
D303,304	2760049011	1S2076A	
D307,308	2760049011	1S2076A	
D309,310	2760235031	HZ5C-1	
D311~314	2760049011	1S2076A	
D315~317	2760049011	1S2076A	
D318	2760432000	1SS270A	
D601~604	2760049011	1S2076A	

#### WARNING:

Parts marked with this symbol A have critical characteristics.

Use ONLY replacement parts recommended by the manufacturer.

Ref. No.	Part No.	Part Name	Remarks
D605,606	2760256008	HZ16-2	
LE101	3939319018	LD-701DU	
LE102	3939371001	LD-201VR (RD)	
LE103,104	3939408013	SEL-4414E	
P201	2760289004	PTH487A01BD222TS	
**************************************			
RESISTORS	(not included C	arbon Film ±5%, ¼W typ	e)
R155	2442043937	RS14B3A100JST (S)	10Ω/1W, ±5%
<b>∆R206</b>	2412379987	RD14B2E102JNBST	1kΩ/¼W, ±5%
<b>≜R207</b>	2412322031	RD14B2E101JNBST	100Ω/¼W,
			±5%
AR215	2412378917	RD14B2E201JNBST	200Ω/¼W,
			±5%
∆R216,217	2412381946	RD14B2E472JNBST	4.7kΩ/¼W, ±5%
AR219,220	2412376922	RD14B2E330JNBST	33Ω/¼W, ±5%
AR221	2412380921	RD14B2E152JNBST	$1.5 k\Omega/\%W$ ,
			±5%
AR222,223	2412379903	RD14B2E471JNBST	470Ω/¼W,
:			±5%
<b>≜R224</b>	2412322031	RD14B2E101JNBST	100Ω/¼W,
			±5%
<b>∆R227,228</b>	2412322031	RD14B2E101JNBST	100Ω/¼W,
	0440007000	DD44D0E040 INIDOT	±5%
AR232,233	2412387908	RD14B2E010JNBST	1Ω/¼W, ±5% 180Ω/¼W,
AR236	2412378904	RD14B2E181JNBST	±5%
AR301~304	2440107024	RS14B3D562JNBF	5.6kΩ/2W,
			±5%
AR325,326	2412322031	RD14B2E101JNBST	100Ω/¼W,
			±5%
AR335	2412378904	RD14B2E181JNBST	180Ω/¼W,
			±5%
AR340,341	2412379987	RD14B2E102JNBST	1kΩ/¼W, ±5%
∆R342	2442043937	RS14B3A100JST (S)	10Ω/1W, ±5%
<b>AR345</b>	2412322031	RD14B2E101JNBST	100Ω/¼W,
	•		±5%
AR349~352	2412387940	RD14B2E4R7JNBST	4.7Ω/¼W, ±5%
<b>∆R353,354</b>	2432033038	RW===3DR18R18	0.18Ωx2, 2W
AR611~614	2440107024	RS14B3D562JNBF	5.6kΩ/2W, ±5%
VR201	2119056008	V16V20FB503	50kΩVariable
			resistor
VR301	2116064048	V06PB502	5kΩ, Semi-
			fixed resistor
VR302	2116064019	V06PB473	47kΩ, Semi-
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		fixed resistor
CAPACITO	RS		
<b>∆C002</b>	2538003014	CK45E2GAC472M	4700pF/400V AC

# DENON

HI-FI Monaural Power Amplifier

# SERVICE MANUAL

# MODEL POA-4400A

## MONAURAL POWER AMPLIFIER

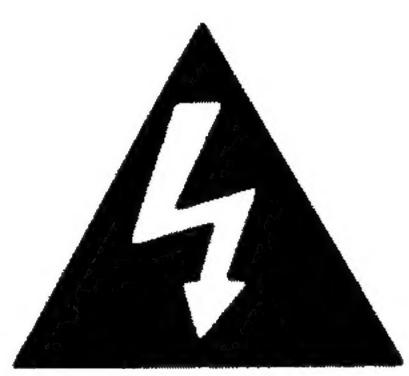


This Service Manual is prepared based on Europe Black Version.

#### CONTENTS

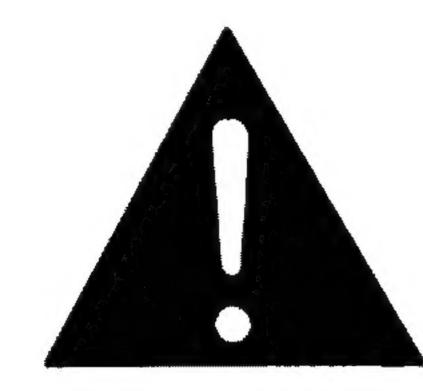
OPERATING INSTRUCTIONS	2	~ 9
REMOVAL OF EACH SECTION		10
METHOD OF ADJUSTMENTS		11
TROUBLESHOOTING		12
BLOCK DIAGRAM		13
SEMICONDUCTORS	14	,15
PRINTED WIRING BOARD PARTS LIST		
KU9152 POWER UNIT PARTS LIST	16	,17
KU9155 POWER UNIT PARTS LIST		17
PRINTED WIRING BOARD PATTERNS		
KU9152 POWER UNIT		18
KU9155 POWER UNIT	*	19
WIRING DIAGRAM	#	20
SCHEMATIC DIAGRAM	*	21
EXPLODED VIEW OF CHASSIS AND CABINET & PARTS LIST		22

NIPPON COLUMBIA CO., LTD.

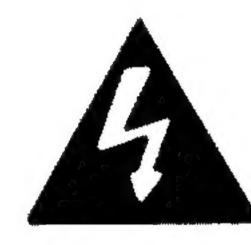


## CAUTION

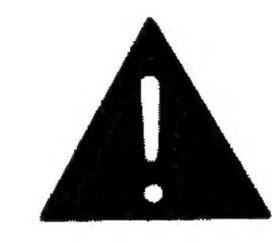
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user of the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instruction in the literature accompanying the appliance.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD,

DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

#### For United Kingdom model only.

#### **WARNING:**

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

#### IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

Blue: Neutral Brown: Live

#### For U.S.A. and Canada models

#### CAUTION

TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

#### Pour les modèles destimés au Canada

#### ATTENTION

POUR PREVENIR LES CHOCS ELECTRIQUES, NE PAS UTILISER CETTE FICHE POLA-RISEE AVEC UN PROLONGATEUR, UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAIS-SER AUCUNE PARTIE A DECOUVERT.

"SERIAL NO.\_\_\_\_\_\_
PLEASE RECORD UNIT SERIAL NUMBER ATTACHED TO THE REAR OF THE CABINET FOR FUTURE REFERENCE"

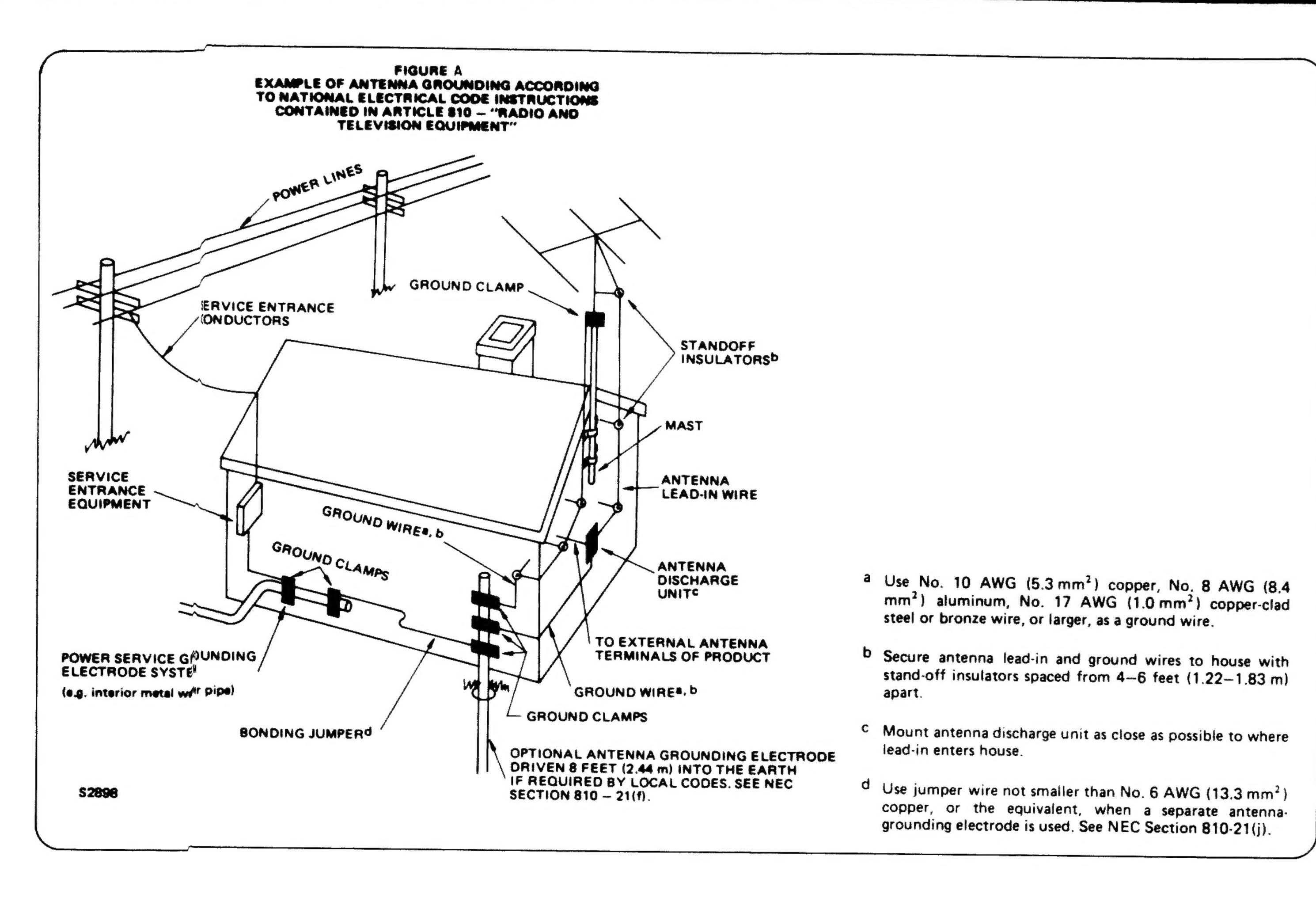
### SAFETY INSTRUCTIONS

- Read Instructions All the safety and operating instructions should be read before the appliance is operated.
- 2. Retain Instructions The safety and operating instructions should be retained for future reference.
- 3. Heed Warnings All warnings on the appliance and in the operating instructions should be adhered to.
- 4. Follow Instructions All operating and use instructions should be followed.
- 5. Water and Moisture The appliance should not be used near water for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
- Carts and Stands The appliance should be used only with a cart or stand that is recommended by the manufacturer.
- 6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to over-



- Wall or Ceiling Mounting The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 8. Ventilation The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
- Heat The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- 10. Power Sources The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
- 11. Grounding or Polarization The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.

- 12. Power-Cord Protection Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
- 13. Protective Attachment Plug The appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
- 14. Cleaning The appliance should be cleaned only as recommended by the manufacturer.
- 15. Power Lines An outdoor antenna should be located away from power lines.
- 16. Outdoor Antenna Grounding If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.
- 17. Nonuse periods The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 18. Object and Liquid Entry Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- Damage Requiring Service The appliance should be serviced by qualified service personnel when:
   A. The power-supply cord or the plug has been damaged; or
  - B. Objects have fallen, or liquid has been spilled into th appliance; or
  - C. The appliance has been exposed to rain; or
  - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - E. The appliance has been dropped, or the enclosure damaged.
- 20. Servicing The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.



#### Die Deutsche Bundespost informiert

#### Sehr geehrter Ruffunktellnehmer,

Dieses Gerät ist von di Deutschen Bundespost als Ton- bzw. Fernseh-Rundfunkempfänger zugelassen. Es entspricht den zur Zeit gelinden Technischen Vorschriften der Deutschen Bundespost und ist zum Nachweis dafür mit der DBP-Prüfnumme gekennzeichnet Bitte überzeugen Sie sich selbst

Dieses Gerät darf im Ramen der nachstehend abgedruckten »Allgemeinen Genehmigung für Ton- und Fernseh-Rundfunkempfänger« in a Bundesrepublik Deutschland betrieben werden. Beachten Sie aber bitte, daß aufgrund dieser Allgemeinen Genimigung nur Sendungen des Rundfunks empfangen werden dürfen \*) Wer unbefügt andere Sendungen (z.B. & Polizeifunks, des Seefunks, der offentlichen beweglichen Landfunkdienste) empfangt, verstößt gegen die Gen/migungsauflagen und macht sich daher nach § 15 Absatz 2a des Gesetzes über Fern-

Die Kennzeichnung mit it DBP-Prüfnummer bietet Ihnen die Gewähr, daß dieses Gerät keine anderen Fernmeldeanlagen einschließ Funkanlagen stört. Die Zusatzbuchstaben S. SE oder SK bei der DBP Prüfnummer besagen außerdem, daß 45 Gerät gegen störende Beeinflussungen durch andere Funkanlagen (z.B. des Amateur funks, des CB-Funks) vilgehend unempfindlich ist. Sollten ausnahmsweise trotzdem Störungen auftreten, so wenden Sie sich bitte alse örtlich zuständige Funkstörungsmeßstelle

#### Allgemeine Genemigung für Ton- und Fernseh-Rundfunkempfänger

Die Allgemeine Ton- un Fernseh-Rundfunkgenehmigung vom 11 12 1970 (veröffentlicht im Bundesanzeiger Nr. 234 vom 16.12 1970) witinter Bezug auf Abschnitt III der Genehmigung durch folgende Fassung der Allgemeinen Genehmigung für Torrund Fernseh-Rundfunkempfänger gemäß den §§ 1 und 2 des Gesetzes über Fernmeideaniagen erself

#### Genehmigung für Tor ind Fernseh-Rundfunkempfänger

- Die Errichtung und # Betrieb von Ton- und Fernseh-Rundfunkempfangern werden nach §§ 1 und 2 des Gesetzes über Fernil/deanlagen in der Fassung der Bekanntmachung vom 17.3.1977 (BGBI 1, S. 459) allgemein genehmigt
- Ton- und Fernseh-Riffunkempfanger im Sinne dieser Genehmigung sind Funkanlagen gemaß § 1 Abs. 1 des Gesetzes über Fer/eideanlagen, die ausschließlich die für Rundfunkempfanger zugelassenen Frequenzabstimmbereiche\*\*lufweisen und zum Aufnehmen und gleichzeitigen Hor- oder Sichtbarmachen von Tonoder Fernseh-Rundfilsendungen bestimmt sind Zum Empfanger gehoren auch eingebaute oder mit ihm fest verbundene Antenn/sowie bei Unterteilung in mehrere Gerate die funktionsmaßig zugehorenden Gerate Außer für den Emplij von Rundfunksendungen durfen Ton- und Fernseh-Rundfunkempfänger nur mit besonderer Genehmigung in Deutschen Bundespost für andere Fernmeidezwecke zusatzlich benutzt werden. In den Empfänger elebaute oder sonst mit ihm verbundene Zusatzgerate (z.B. Ultraschallfernmeldeanlagen, infrarotfemmeldeanillen) werden von dieser Genehmigung nicht erfaßt (ausgenommen die Einrichtungen zum Empfang des Verkellrundfunks). Desgleichen sind andere technische Empfangereigenschaften, die über den eigentlichen Zweck hes Aundfunkempfangers hinausgehen iz B. zum Empfang anderer Funkdienste, für die Wiedergabe im Rakfin von Textubertragungsverfahren) hierdurch nicht genehmigt. Hiertur gelten besondere Regelungen

Diese Genehmigung willunter nachstehenden Auflagen erteilt

- Ton- und Fernseh-Fidfunkempfanger mussen den jeweils geltenden Technischen Vorschriften für Ton- und Fernseh-Rundfunkellanger entsprechen Eingebaute Zusatzgerate mussen den für sie geltenden Bestimmungen und technisen Vorschriften genügen
- Anderungen der Tehischen Vorschriften die im Amtsblatt des Bundesministers für das Post- und Fernmeldewesen veröftenijft werden muß bei schon errichteten und in Betrieb genommenen Ton- und Fernseh-Rundfunkempfangehachgekommen werden, wenn durch den Betrieb dieser Rundfunkempfanger andere elektrische Anlagen gein werden
- Serienmaßig hergeillte Ton- und Fernseh-Rundfunkempfanger mussen zum Nachweis datur, daß sie den Technischen Vorschlen entsprechen, mit einer DBP-Prufnummer gekennzeichnet sein \*\*\*) Die DBP-Prufnum mer sagt über die ittrische und mechanische Sicherheit und die Einhaltung der Strahlenschutzbestimmungen nichts aus

- Ton- und Fernseh-Rundfunkempfänger dürfen an ortsfesten oder nichtortsfesten Rundfunk-Empfangsantennenanlagen, -Verteilanlagen oder Kabelfernsehanlagen betrieben und im Rahmen der Bestimmungen über private Drahtfernmeldeanlagen mit Drahtfernmeldeanlagen verbunden werden
- Auf demselben Grundstuck oder innerhalb eines Fahrzeuges dürfen Ton- und Fernseh-Rundfunkempfänger mit anderen Geräten oder sonstigen Gegenständen iz B. Plattenspieler, Magnetaufzeichnungs- und «Wiedergabegeräte. Antennen) verbunden werden, sofern diese Geräte von der Deutschen Bundespost genehmigt sind oder keiner Genehmigung bedurfen
- Die räumliche Kombination von Funkanlagen mit Ton- oder Fernseh-Rundfunkempfängern ist nur dann zulassig. wenn die betreffenden Funkanlagen je für sich genehmigt sind
- Mit Ton- oder Fernseh-Rundfunkempfängern dürfen aufgrund dieser Genehmigung nur Sendungen des Rundfunks empfangen werden, also übertragene Tonsignale (Musik, Sprache) und Fernsehsignale (nur Bildinformationen) Andere Sendungen (z.B. des Polizeifunks, der öffentlichen beweglichen Landfunkdienste, Datenübertragungen) dürfen nicht aufgenommen werden, werden sie jedoch unbeabsichtigt empfangen, so durfen sie weder aufgezeichnet, noch anderen mitgeteilt, noch für irgendwelche Zwecke ausgewertet werden. Das Vorhandensein solcher Sendungen darf auch nicht anderen zur Kenntnis gebracht werden
- 4 Durch Ton- oder Fernseh-Rundfunkempfanger darf der Betrieb anderer elektrischer Anlagen nicht gestort wer-
- Anderungen der Ton- oder Fernseh-Rundfunkempfanger, die die zulassigen Frequenzabstimmbereiche der Empfanger erweitern, gehen über den Umfang dieser Genehmigung hinaus und bedurfen vor ihrer Ausführung einer besonderen Genehmigung der Deutschen Bundespost
- Wer aufgrund dieser Genehmigung einen Ton- oder Fernseh-Rundfunkempfanger betreibt, hat bei einer Anderung der kennzeichnenden Merkmale von Ton- oder Fernseh-Rundfunksendem (insbesondere bei Anderung des Sendeverfahrens oder bei Frequenzwechsell die ggl. notwendig werdenden Anderungen an den Rundfunkempfängern auf seine Kosten vornehmen zu lassen
- 6 Die Deutsche Bundespost ist berechtigt. Rundfunkempfanger und mit ihnen verbundene Gerate darauf zu prufen ob die Auflagen der Genehmigung und die Technischen Vorschriften eingehalten werden Den Beauftragten der Deutschen Bundespost ist das Betreten der Grundstücke oder Raume, in denen sich Ton oder Fernseh-Rundfunkempfanger befinden, zu den verkehrsublichen Zeiten zu gestatten. Befinden sich die Rundfunkempfanger oder mit ihnen verbundene Gerate nicht im Verfugungsbereich desjenigen der die Empfanger betreibt, so hat er den Beauftragten der Deutschen Bundespost Zutritt zu diesen Teilen zu ermog-

Bei Funkstörungen die nicht durch Mangel der Rundfunkempfanger oder der mit ihnen verbundenen Gerate verursacht werden, konnen die Funkmeßdienste der Deutschen Bundespost zur Feststellung der Storung in Anspruch genommen werden

- Diese Genehmigung kann allgemein oder durch die ortlich zustandige Oberpostdirektion einem einzelnen Betreiber gegenüber für einen bestimmten Rundfunkempfanger widerrufen werden. Ein Widerruf ist insbesondere Zulässig, wenn die unter Abschnitt il aufgeführten Auflagen nicht erfüllt werden Anstatt die Genehmigung zu widerrufen kann die Deutsche Bundespost anordnen, daß bei einem Verstoß
- gegen eine Auflage ein Ton- oder Fernseh-Rundfunkempfanger außer Betrieb zu setzen ist und erst bei Einhaltung der Auflagen wieder betrieben werden darf Die Auflagen dieser Genehmigung konnen jederzeit erganzt oder geandert werden 2 Diese Genehmigung ersetzt die Allgemeine Ton- und Fernseh-Rundfunkgenehmigung vom 11 12 1970 sie gilt

Bonn den 14.5 1979

ab 1 7 1979

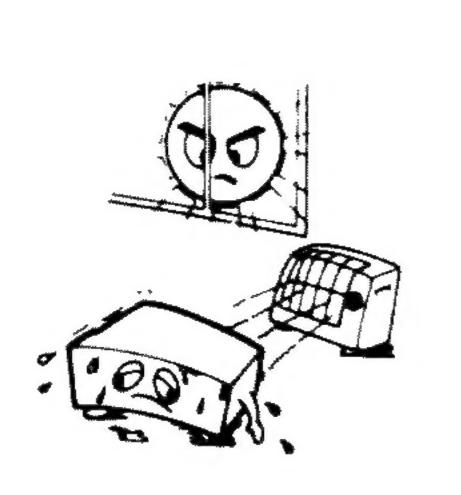
Der Bundesminister für das Post- und Fernmeidewesen Im Auftrag

\*) Zum Empfang akrer Sendungen darf dieses Gerat nur mit Genehmigung der Deutschen Bundespost benutzt werden. Allgemein genehmigt ist zur Zeit der Empfang der Aussendungen von Amateurfunkstellen und der Normalfrequenz- und Zieichensendungen

\*\*) Siehe Technischlorschriften für Ton- und Fernseh-Rundfunkempfänger, veröffentlicht im Amtsblatt des Bundesministers für das Post- und Fernmeldewesen \*\*\*) Für ausnahmswit noch nicht gekennzeichnete, vor dem 1.7.1979 errichtete und in Betrieb genommene Ton-Rundfunkempfanger wird die Kennzeichnung nicht verlangt Please read the instructions before using. Following the instructions and operating hints will ensure top performance for many years.

Keep the Operating Instructions in a secure place.

#### NOTE ON USE

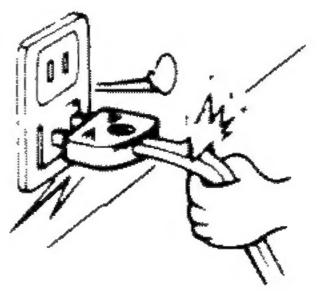


- Be careful of high temperatures. Do not place he amplifier where it will be exposed to direct sunlight or close to heating devices. Installation in a cabinet
- Avoid installing the amplifier in a sealed, airtight cabinet
- If a cabinet is to be used. make certain that the amp is placed in a well-ventilated section. If necessary, cut out sufficient space in the cabinet walls to allow heat to escape.



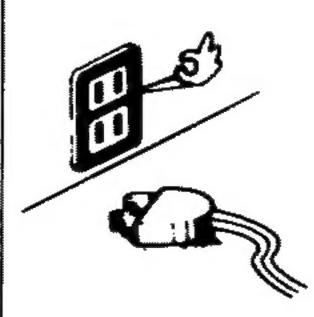
Humidity, water and dust must be prohibited.

 Do not place the amplifier in dusty areas or those subject to high humidity. Do not place vases or other containers filled with water on top of the equipment



Be careful with the power

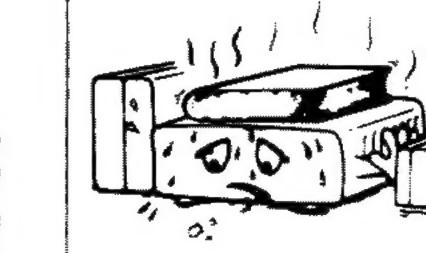
supply core. Do not pull out the plug by yanking on the power supply cord. Always take the plug in hand pull it out.



During your absence

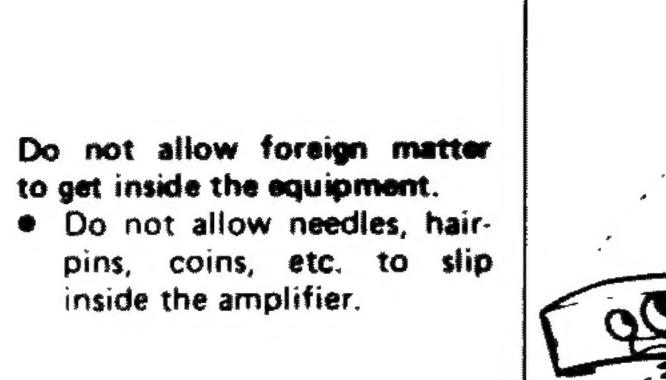
If no one will be in the room for a long period and the amplifier is not being used, make certain to pull out the plug from the wall

Handling the cabinet



Do not place objects on top of the ventilation holes.

- Placing objects on top of the ventilation holes wil result in malfunction.
- The ventilation holes are extremely important in. allowing heat to escape from the amplifier. If they are covered up, the internal temperature of the amplifier will rise abnormally Be careful to avoid this.



The quality and color of the cabinet will be affected if i

pellent or solvents such as benzene or paint thinners. Do not use these on the

cabinet. To remove dirt, use a soft chemically treated cloth



Do not open the cabinet.

 It is extremely dangerous to open the cabinet or its bottom lid and reach inside. Do not open the am-

If a problem occurs with the equipment, unplug the power supply cord at once, and contact the store where you purchased the amplifier.

#### SPECIFICATIONS

Dynamic power:

Rated output power: 160 W min., RMS into 8 ohms from

20 Hz to 20 kHz with no more than 0.02% total harmonic distortion

250 W (4 ohm, DIN 1 kHz) 400 W (at 4 ohm)

600 W (at 1 ohm) Total harmonic Less than 0.002%

(-3 dB at rated output, 8 ohm) distortion:

Intermodulation Less than 0.002%

distortion: (60 Hz/7 kHz: 4/1 at rated output,

8 ohms) Power band width: 5 Hz - 80 kHz

(8 ohms, THD 0.03%) Frequency response:

1 Hz - 300 kHz + 0, -3 dB (at 1 W) Input sensitivity: 1 V (Normal in)

1 V (Balance in) Input impedance: 25 k ohms (Normal in)

10 k ohms (Balance in) Output impedance: 0.1 ohm (1 kHz)

S/N ratio: Output terminals:

Power consumption:

Power supply:

123 dB (IHF, A-weighting) (Normal)

Speakers

4 ohm  $\sim$  16 ohm A + B $8 \text{ ohm} \sim 16 \text{ ohm}$ 

AC 220 V/50 Hz (for European countries)

AC 240 V/50 Hz (for U.K. and Australia)

AC 120 V/60 Hz (for U.S.A. and Canada)

AC 110/120/220/240 V/50, 60 Hz

[for Asia (Multiple)] 4 A (for U.S.A. and Canada)

220 W (for IEC)

175 W (for Multiple) Dimensions:

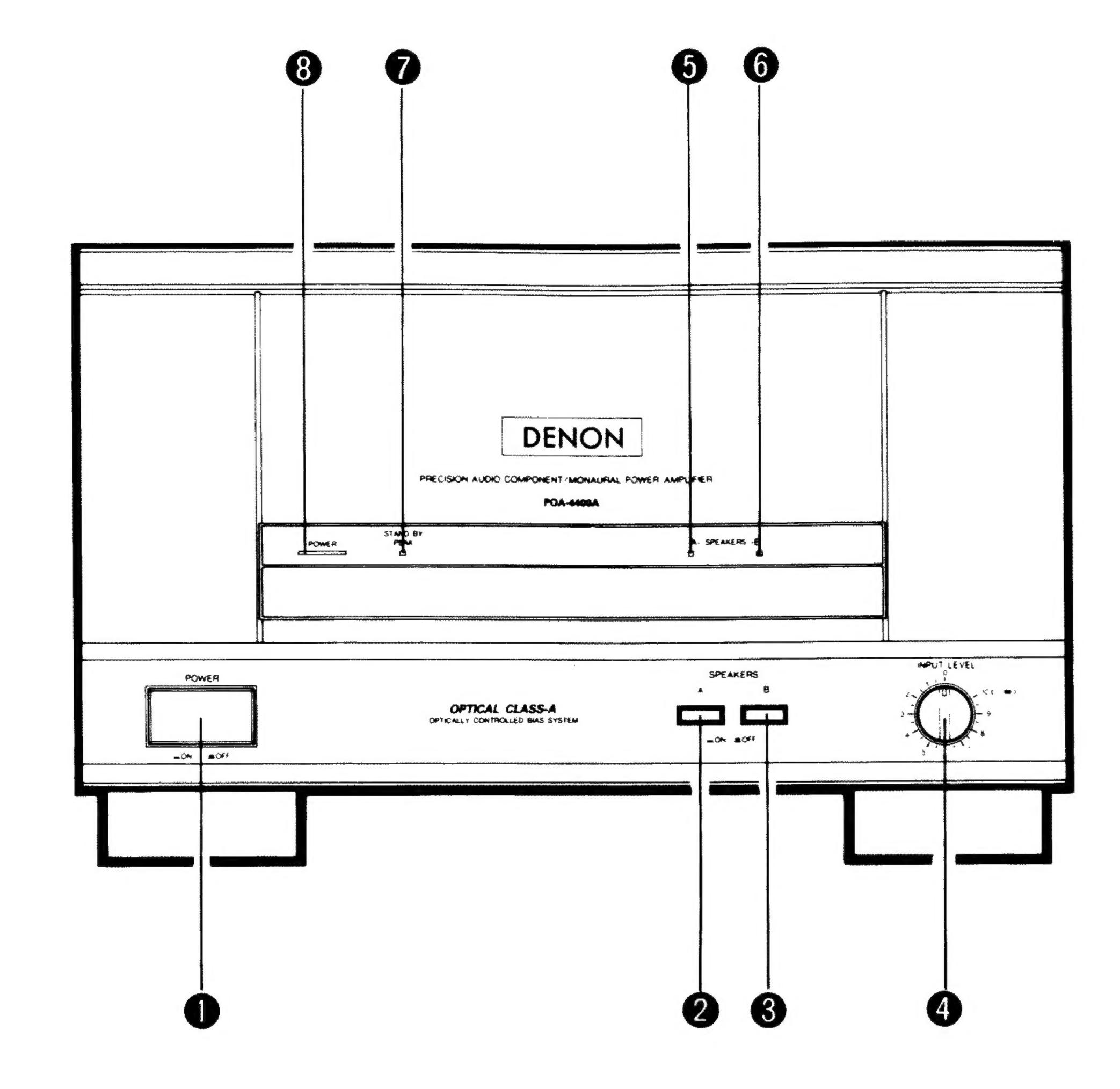
 $310 (W) \times 192 (H) \times 420 (D) mm$ (Including control knobs and feet)

10.3 kg

Weight:

<sup>\*</sup> Design and specifications are subject to change without prior notice.

#### NAMES AND FUNCTIONS OF PARTS



#### POWER (Power switch)

When this switch is pressed, the power is turned on, the POWER indicator (B) flashes for some seconds and then lights steadily, and stable operation condition is reached. When this switch is pressed again, the power is turned off.

#### SPEAKERS-A:

When this switch is pressed, the speaker system connected to the SPEAKERS-A terminal is operated, and indicator for A lights.

#### SPEAKERS-B:

When this switch is pressed, the speaker system connected to the SPEAKERS-B terminal is operated, and indicator 6 for B lights.

#### INPUT LEVEL

Adjust the input level with this knob.

Indicator for SPEAKERS-A

Indicator for SPEAKERS-B

#### STAND BY / PEAK

#### STAND BY

The set will not operate when this indicator is "on".

- (1) When one end of a remote plug cord is inserted in the DC input on the back panel and the other end is open (not connected)
- (2) When one end of a remote plug cord is connected to the power amp and the other end is connected to the preamp (such as DAP-5500), and the preamp's power switch is "off".

Note: If the preamp power switch is turned "on" under the above conditions, after the STAND BY indicator 7 has gone off, the POWER indicator will blink for a few seconds until the amp has stabilized, then the unit will be in the normal state.

#### PEAK

In order to enjoy high quality amplification of the program source with minimum distortion, operate the unit so as to keep the volume within a range where the PEAK indicator does not light up.

#### POWER (Power indicator)

#### PROTECTOR

Various protector circuits are included in this unit. This POWER indicator blinks when these circuits are operating.

- (1) Muting time, which lasts for several seconds after the power is turned "on".
- (2) When the offset voltage of the power amp has drifted outside the prescribed range.
- (3) When the temperature of the power amp is abnormally high.
- (4) When a speaker terminal is shorted or a speaker's impedance is extremely low.

For cancellation of the operation of these protector circuits, set the POWER switch to OFF.

When the POWER indicator still flashes several seconds after the POWER switch has been switched on, refer to the section TROUBLESHOOTING and check for the cause.

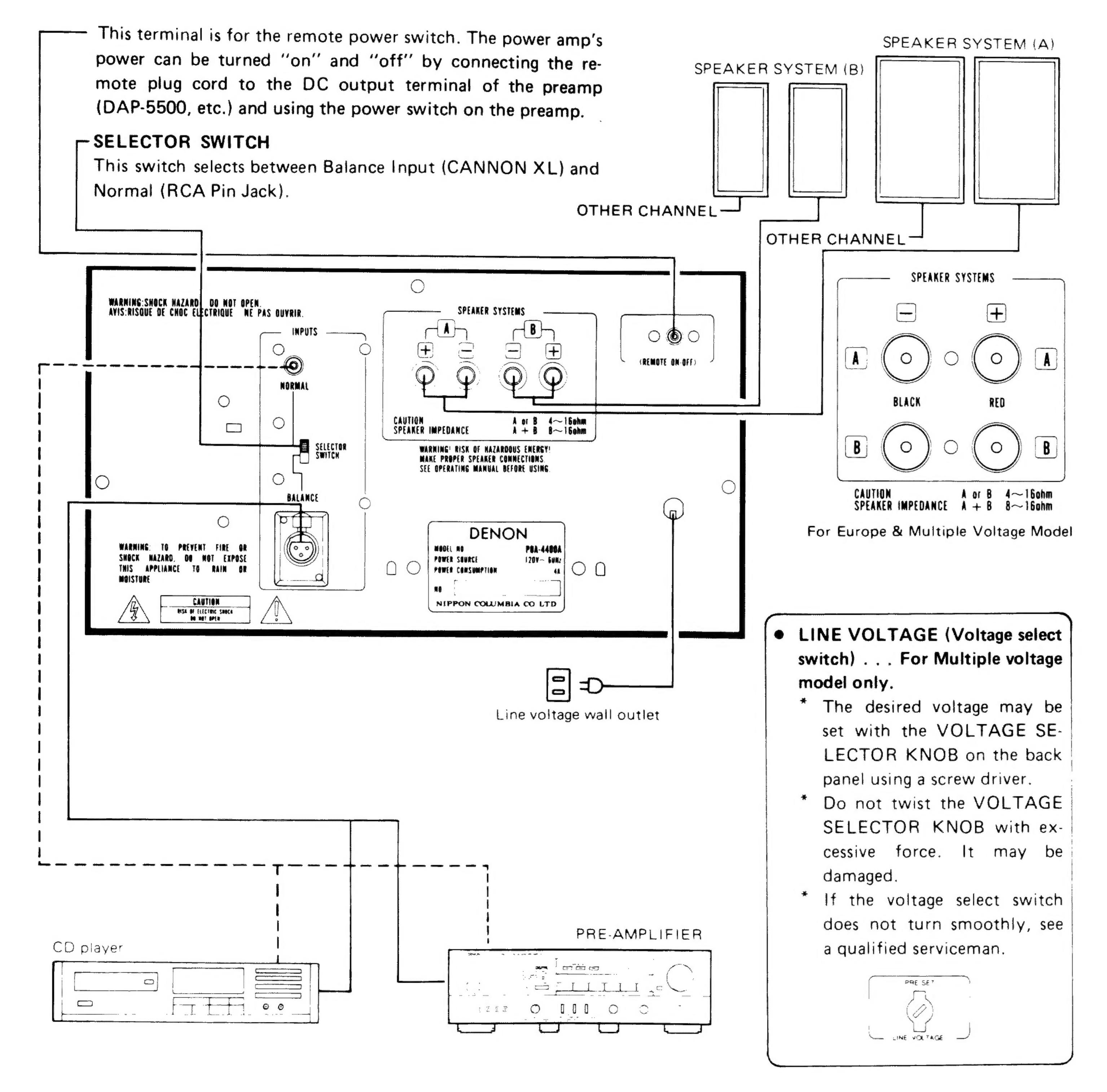
#### CONNECTIONS

#### Notes on Connection

- Do not plug the power supply cord into the wall socket, until all the connections are complete.
- Plug the pins in securely. An incomplete connection will cause noise generation.
- Binding the pin plug to the power supply cord, or setting the pin cord close to the power supply transformer will cause humming or noise, and should be avoided.

#### Connection to the speaker system

Connect the speaker system for the left channel (the left side as viewed facing the front) to the L speaker terminal on the back panel, and the speaker system for the right channel into the R terminal. There are two sets of SPEAKERS terminals. If only one speaker system is to be used, connect it to the SYSTEM (A) terminals.



#### Connection to the speaker system

- When connecting the speaker terminals to the speaker systems, make certain to connect the polarities correctly (+ to + and − to −). If the polarities are incorrect when the two are connected, the center area of the sound will be lacking, the positions of the musical instruments will not be clear, and the stereo directional sensitivity will be impaired.
- During connection, be careful that the center wires in the speaker cords do not protrude from the terminals to contact any other terminal, and that the central wires in the separate speaker cords do not contact each other.

#### Speaker impedance

- When the A and B terminal sets are to be used separately, the speakers that are to be connected should have a nominal impedance of 4 to 16 ohm.
- When the two sets (A + B) are to be used at the same time, use of speakers whose impedance is outside the range from 8 to 16 ohm will result in malfunction. Be careful not to let this happen.
- Speakers with a lower impedance may cause the protective circuitry to operate.

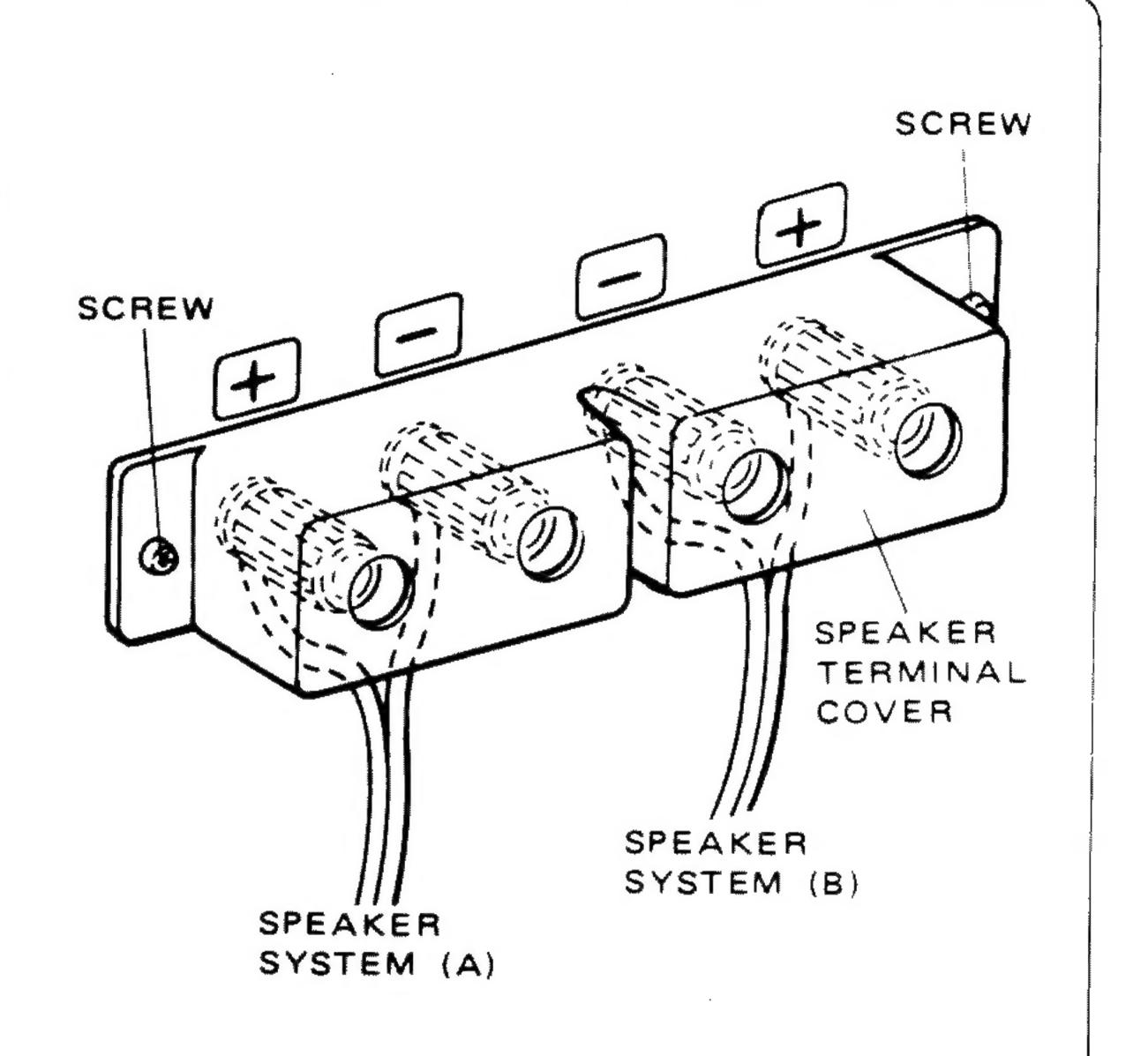
#### Models for the U.S.A. and Canada only. (Case of UL standardized articles)

#### WARNING!

This amplifier produces a large power output at the speaker terminals, which means that a dangerous amount of energy is generated and that there is the danger of electric shock. Please perform the speaker cord connections correctly as follows.

(Making connections that differ from the specified method may give rise to a shock hazard.)

- 1) For the speaker connection cord, use a cord made with noncombustible insulation material with a VW-1 rating or a cord of the SPT-1 type or one with higher flexibility.
- 2) Use a screwdriver to take the screws holding the speaker terminal cover out.
- 3) Connect the speaker cord specified in 1) to the speaker terminals.
- 4) Tie the speaker cord, then pass it through the cutout hole in the speaker terminal cover.
- 5) Install the speaker terminal cover removed in 2).



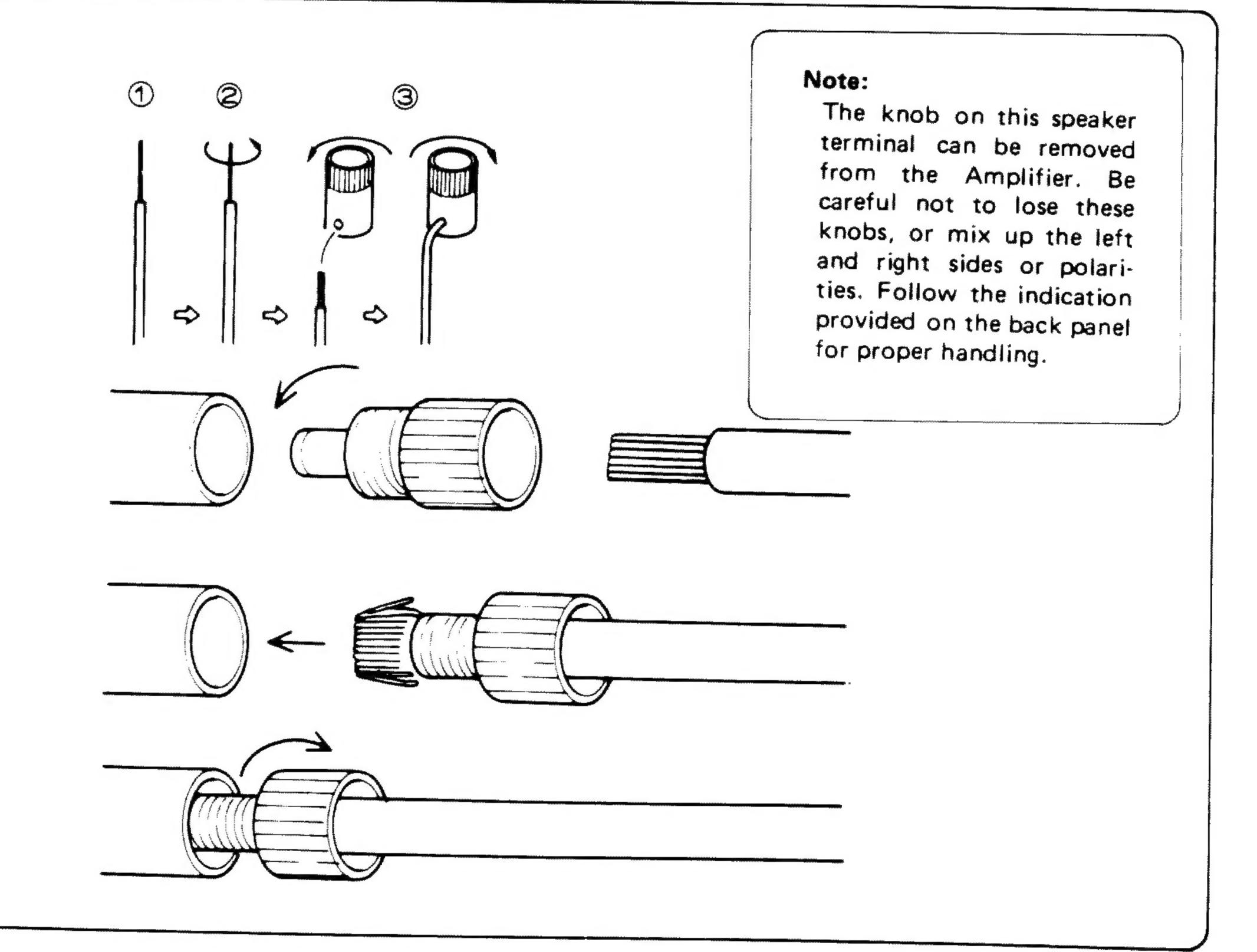
#### Models for destinations other than the U.S.A. and Canada.

#### For regular cords

- 1. Remove the insulation from the end of each
- 2. Twist the center wire.
- 3. Turn the speaker terminal to loosen it, insert the center wire of the cord, and then tighten the terminal to hold the wire in place.

#### For extra-large cords

- 1. Remove the insulation from the end of the cord. Loosen and remove the end of the speaker terminal.
- 2. Insert the center wire, and bend back the wire.
- 3. Insert the cord in the terminal, and turn the terminal to the right to tighten it.

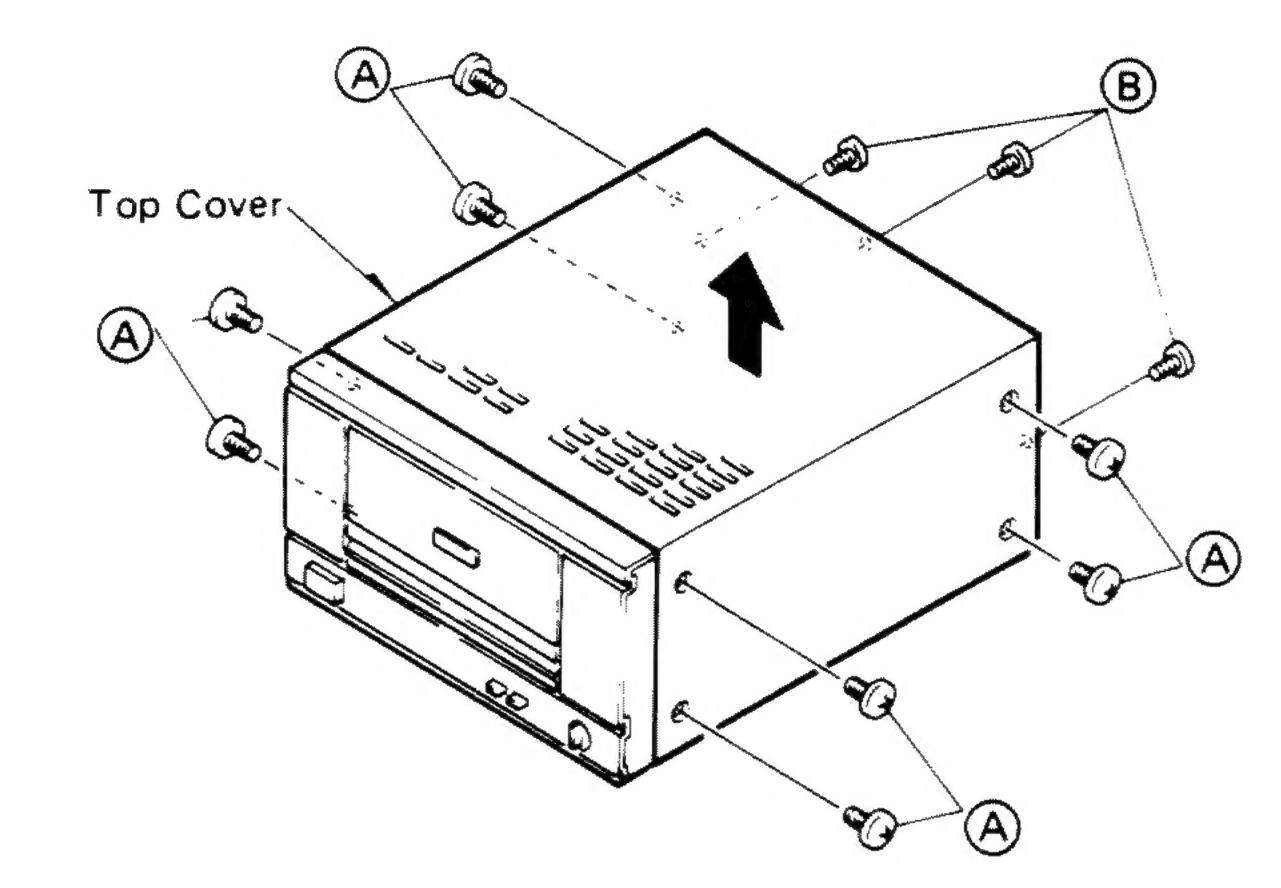


#### EPOA-4400A

#### REMOVAL OF EACH SECTION

#### 1. Top Cover

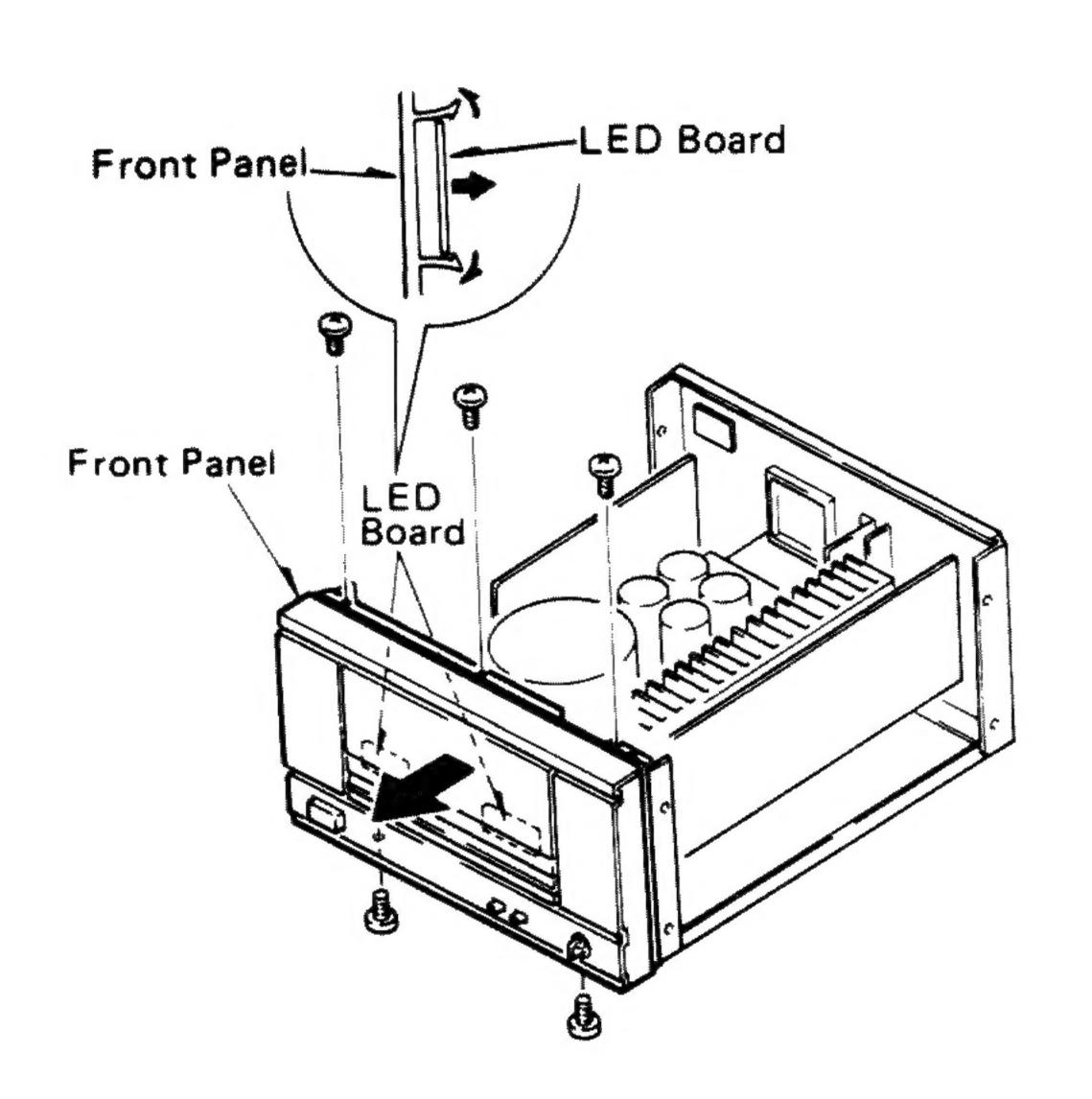
Remove 8 screws (A) and 3 screws (B), then pull up to detach the Top Cover in the direction the arrow shows.



#### 2. Front Panel and LED P.C. Board

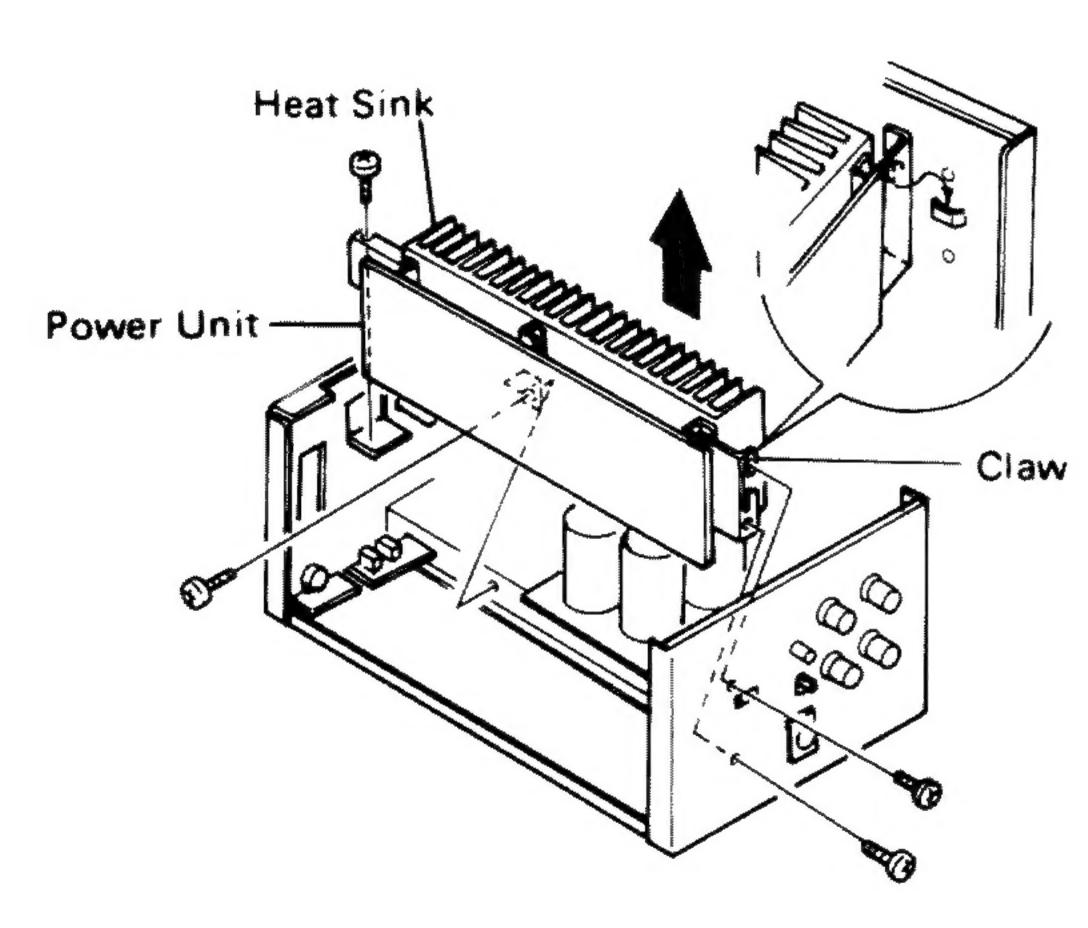
Unfasten the 2 screws from the bottom side and the 3 screws from the upper side, then draw out to detach the Front Panel in the direction the arrow shows.

In the next place, remove the claw on the rear side of the front panel securing the LED P.C. Board and detach it.



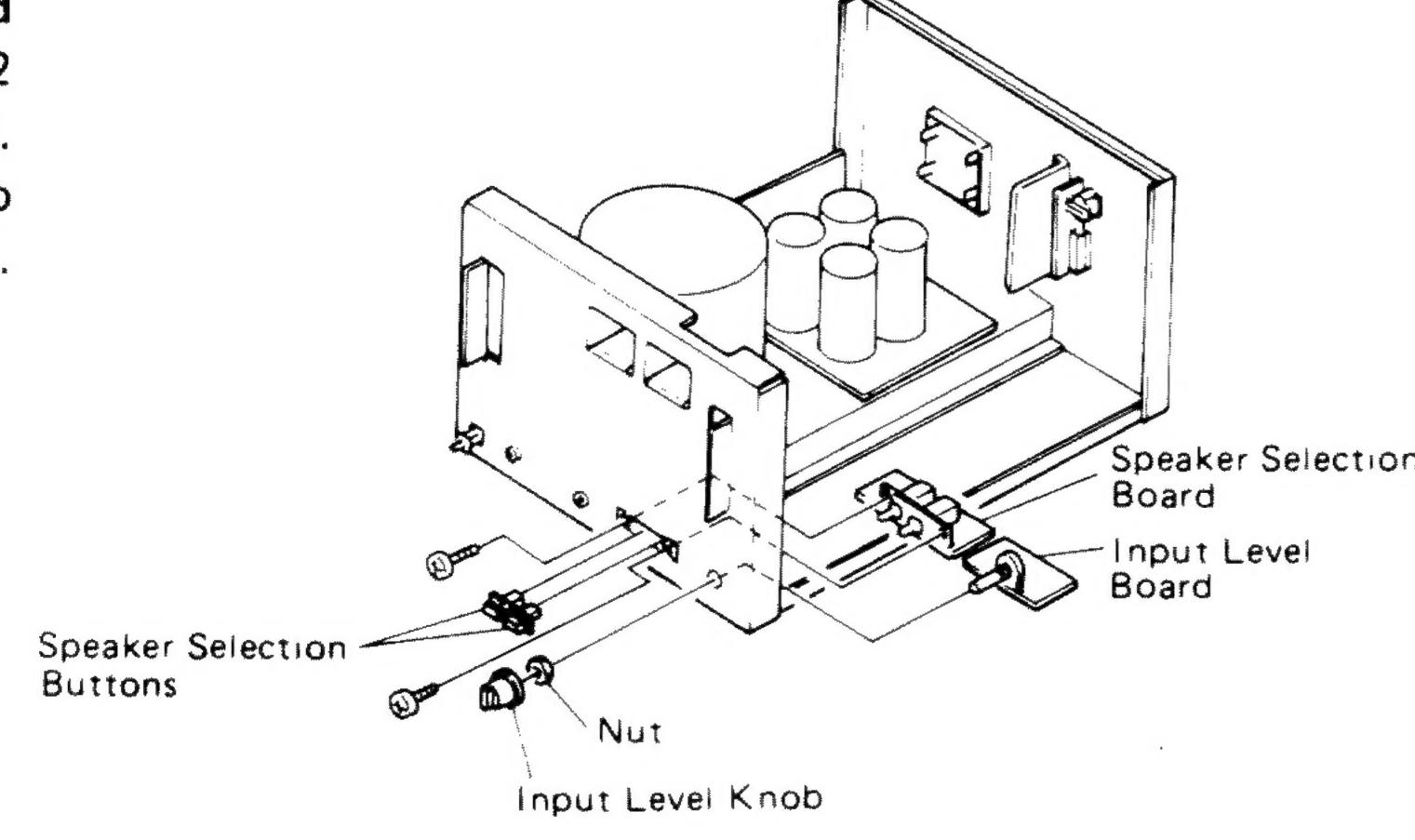
#### 3. Power Unit P.C. Board and Heat Sink

Remove the 4 screws, and lift the Heat Sink so to release it from the claw on the back panel and detach the Heat Sink.



# 4. Speaker Selection P.C. Board and Input P.C. Board Remove the 2 speaker selection buttons and the 2 screws, then draw out the Speaker Selection P.C.

Board backward. Remove the input level knob and the nut, then draw out the Input Level P.C. Board backward.



10

#### POA-4400A

#### METHOD OF ADJUSTMENTS

#### Setup

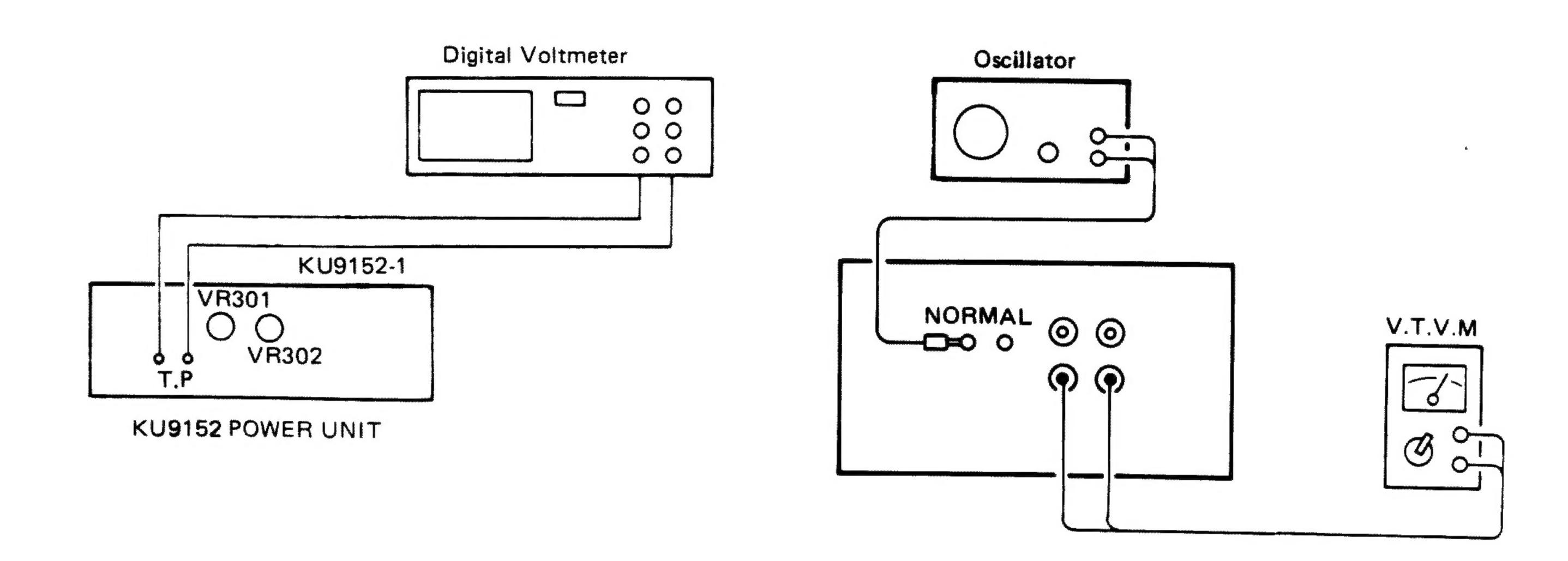
- 1. Keep the unit away from direct wind blown by an air-conditioner and an electric fan, and keep the unit under normal conditions. Adjust the range of ambient temperature to  $15 30^{\circ}$ C.
- 2. Set the following switches as follows:
  - POWER (Power switch) to off
  - INPUT LEVEL (level control) to 0 ( )
  - SPEAKERS (Speaker terminal) to no load (Speaker disconnected)

#### 1. Adjustment of Idle Current (KU9152-1)

- (1) Connect DC Voltmeter to Test Points (T.P) of KU9152.
- (2) Turn Power Switch "ON".
- (3) Adjust VR301 so that the DC Voltmeter reads 1 ±0.5 mV.
- (4) Then after 10 minutes warmup, readjust VR301 so that the DC Voltmeter reads  $8 \pm 1 \, \text{mV}$ .
- (5) Connect V.T.V.M. to the Speaker Terminals.
- (6) Set the Oscillator frequency at 1 kHz, and Output Level at 60 mV, then connect with NORMAL Input Terminal.
- (7) Adjust the LEVEL Control turning clockwise to obtain the indication of the V.T.V.M. connected to the Speaker Terminal becomes 2 V.
- (8) Confirm that the DC Voltmeter connected to the T.P. becomes slightly greater value, then adjust the VR302 to obtain 40 ±5 mV on the meter.
- (9) After 20 minutes, readjust the VR302 for 60 ±5 mV.

#### 2. Adjustment of Neutral Point Voltage

- (1) Connect a digital voltmeter to the SPEAKER terminal.
- (2) Turn the unit power on.
- (3) Turn the LEVEL controls on the front panel fully clockwise (maximum).
- (4) Confirm the voltage on the meter indicates within ±100 mV value.



#### TROUBLESHOOTING

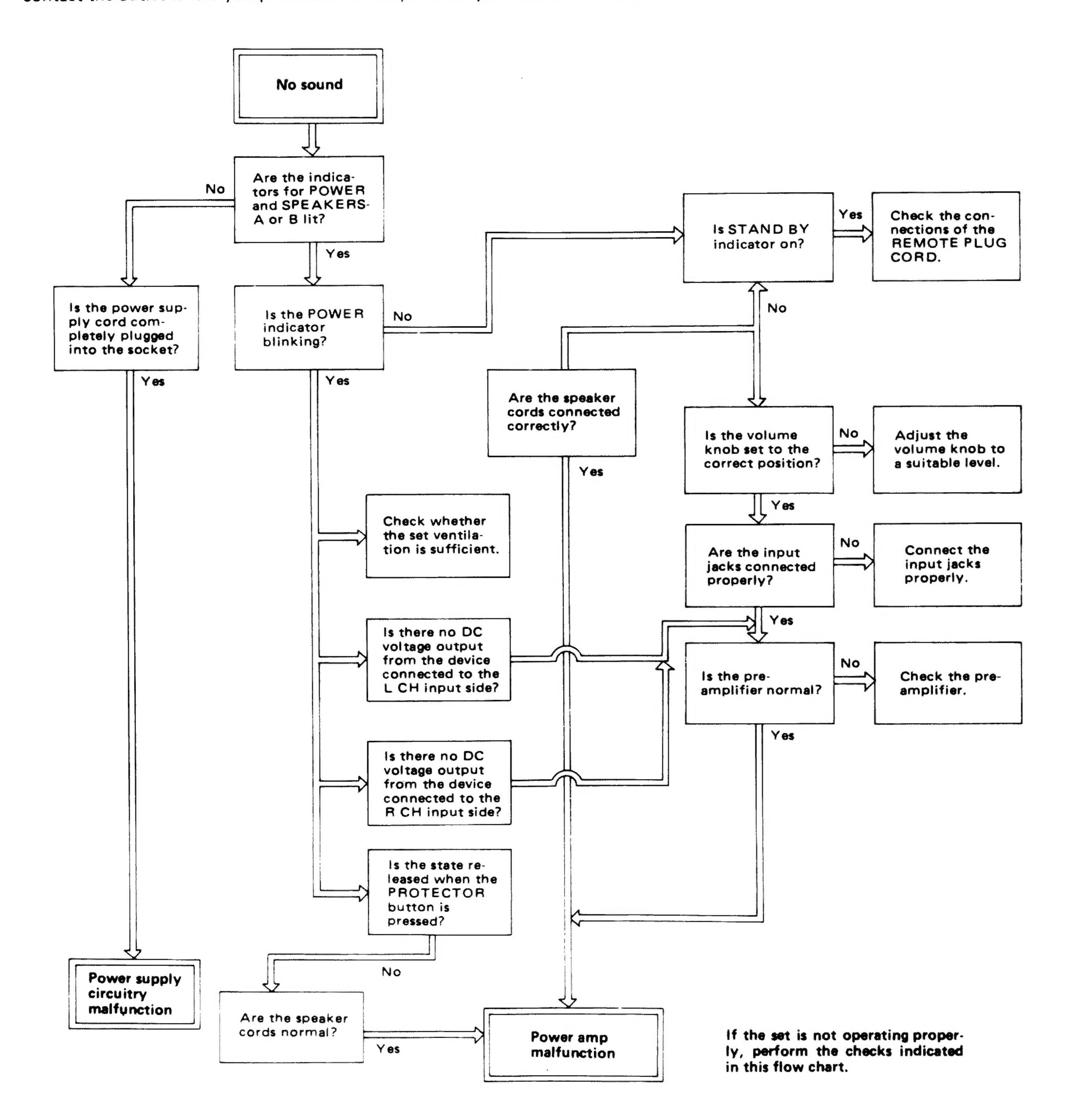
Before troubleshooting, be sure to check whether your audio system is really the source of the problem.

If you think the amplifier is out of order, first check the following one more time:

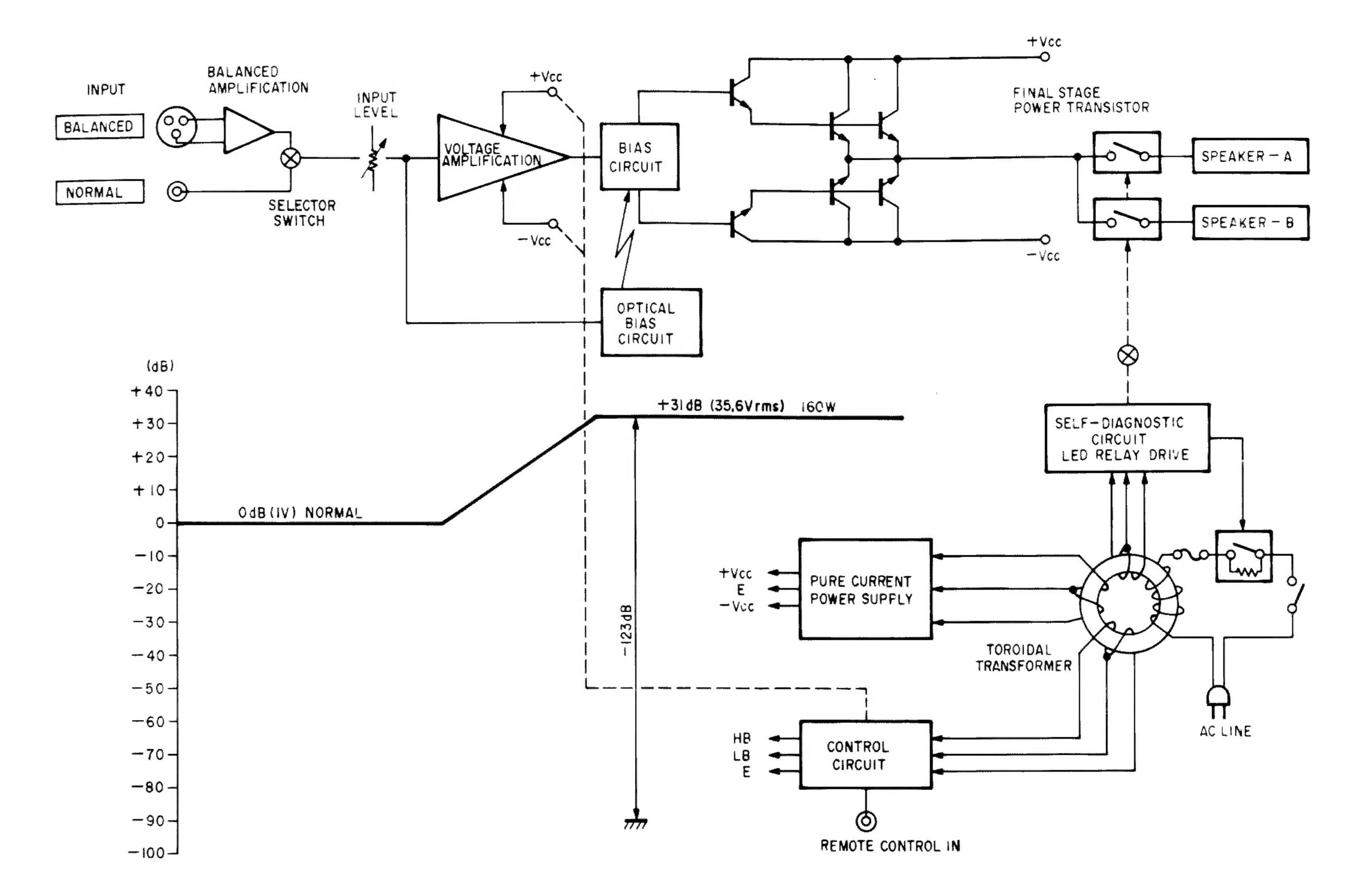
- 1. Are all the connections correctly made?
- 2. Is the set being operated properly in accordance with the Operating Manual?
- 3. Are the speakers and preamplifier being operated correctly?

If the set does not operate properly, perform the checks indicated in the flow chart below.

If none of the items listed apply to the difficulty, the amplifier is probably out of order. Turn off the power immediately, and contact the outlet where you purchased the amplifier or your nearest DENON dealer.



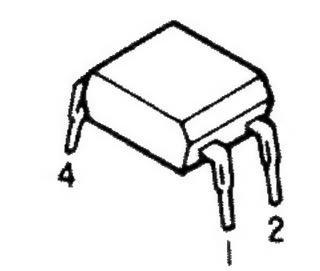
#### **BLOCK DIAGRAM**

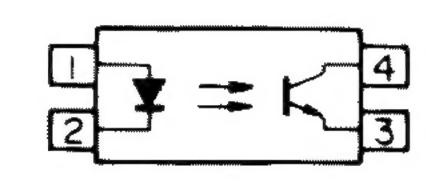


#### SEMICONDUCTORS

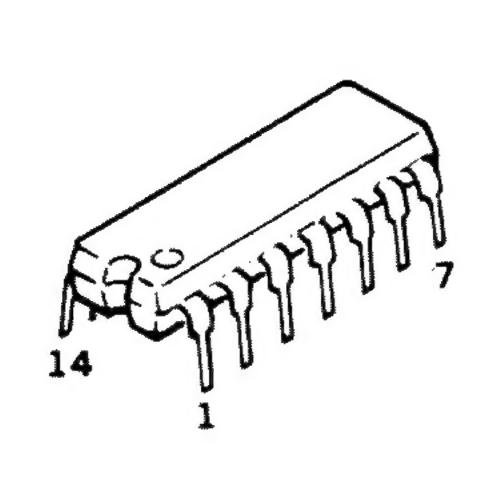
#### • IC

TLP521-1(BL)(Toshiba)

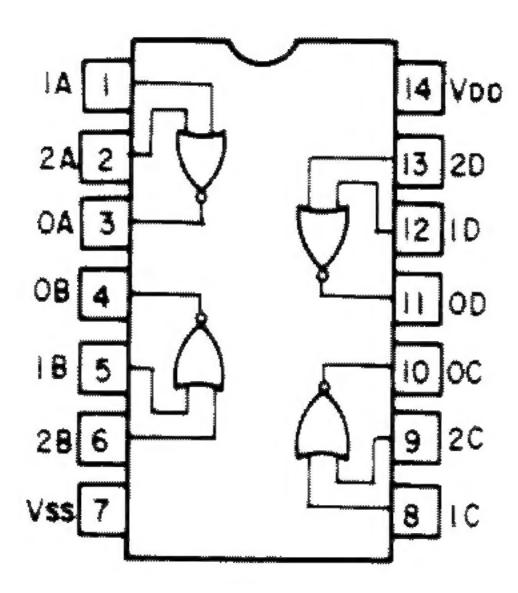






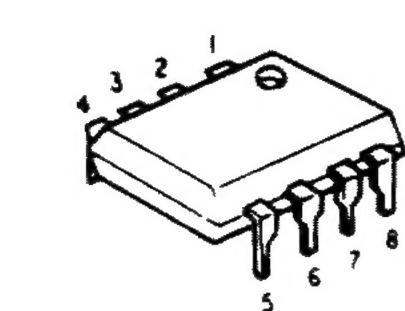


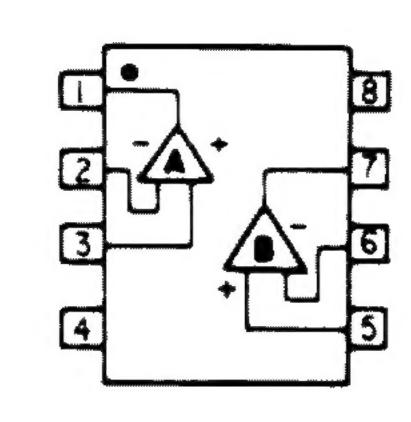
M5238P (Mitsubishi)



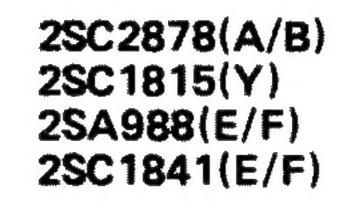
NJM2068ADA (JRC)

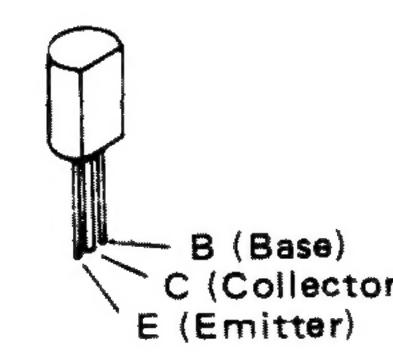
A OUTPUT 7 B OUTPUT VEE 4 5 B+IMPUT



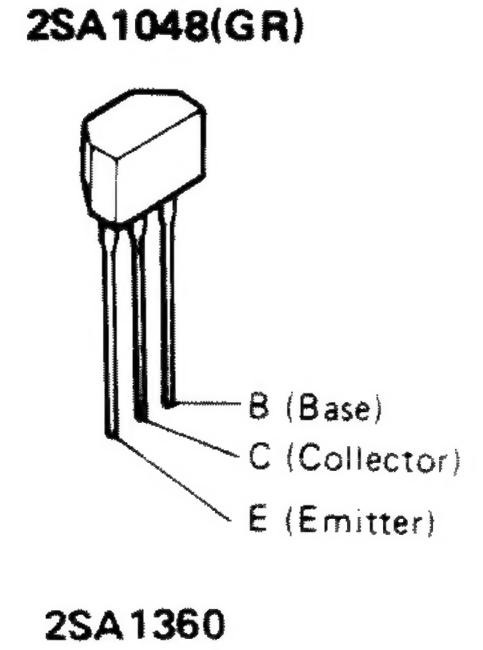


#### Transistor





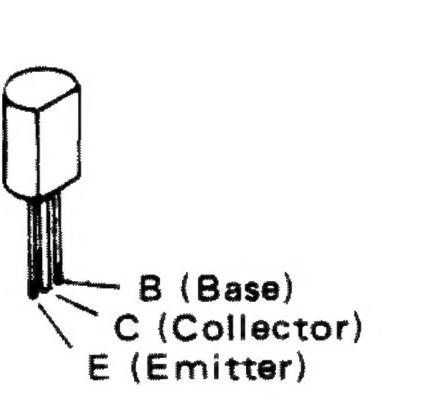
B (Base) C (Collector)



2SC2458(BL)

-B(Base) C(Collector) E(Emitter)

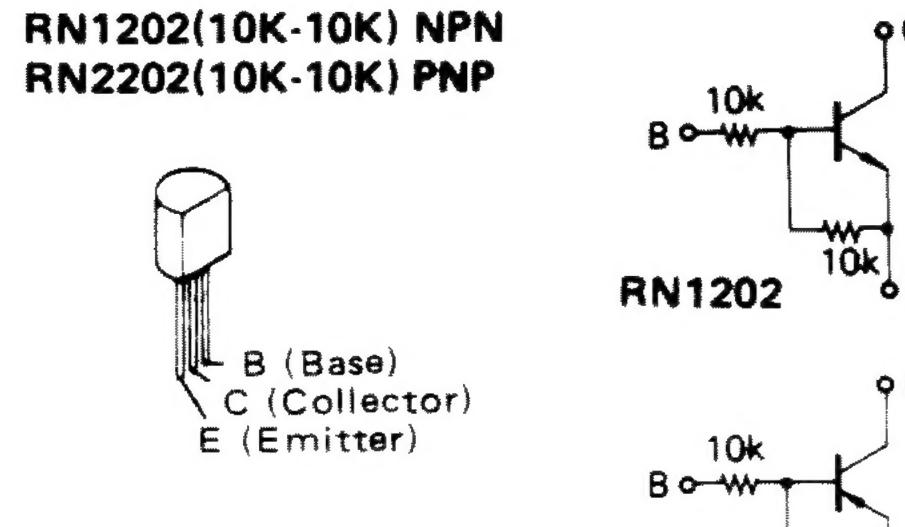
2SA1321 2SC2705(O/Y) 2SC3334

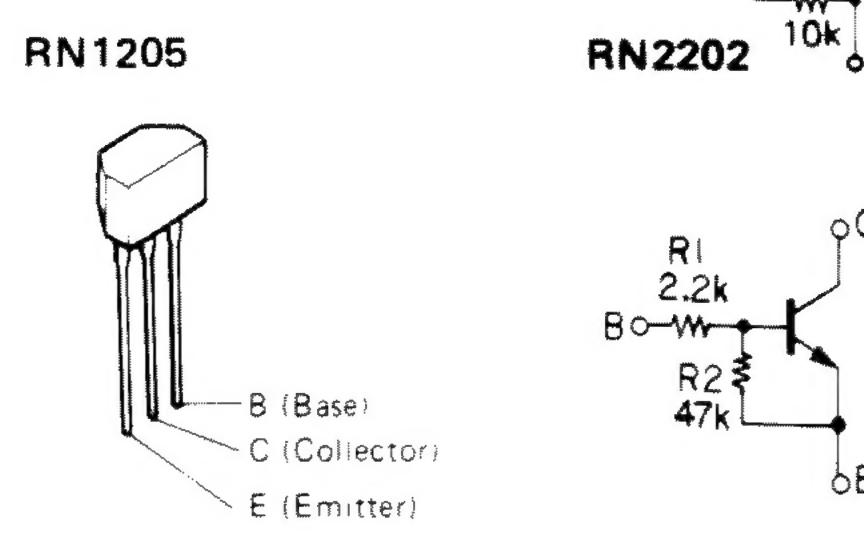


C (Collector) B (Base)

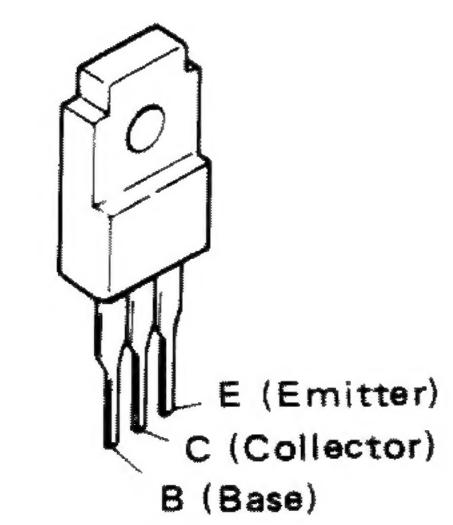
2SA968(Y)

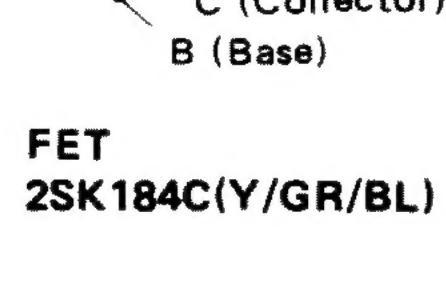
2SC2238(Y)

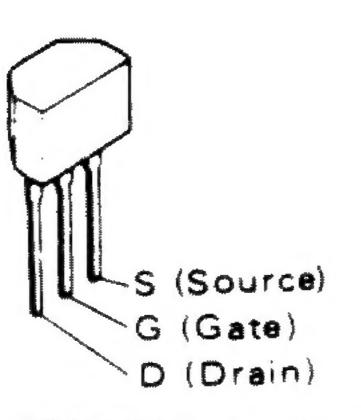




2SD1944

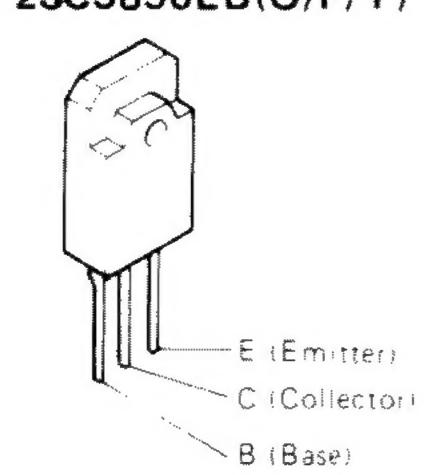




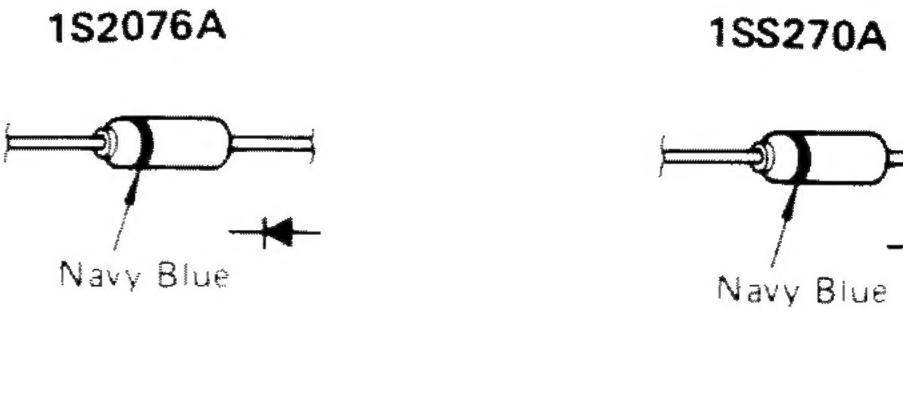


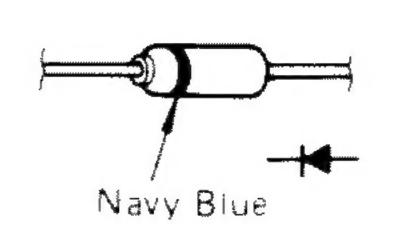
Because of 2SK184C is selected VGS ing TR201,TR202 be sure to replace them in pair.

#### 2SA1492LB(O/P/Y) 2SC3856LB(O/P/Y)

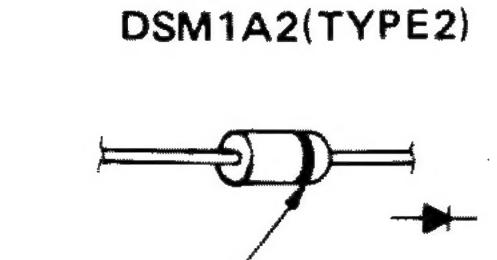


#### Diode

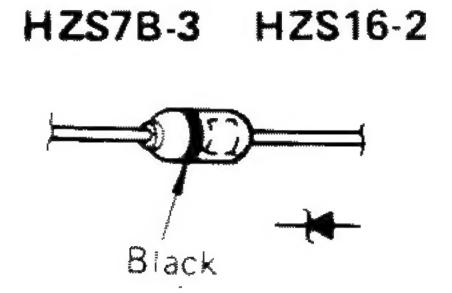




LD-201VR(RD)



White



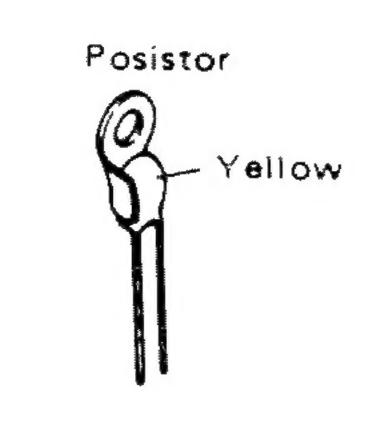
4D4B42(LCI)

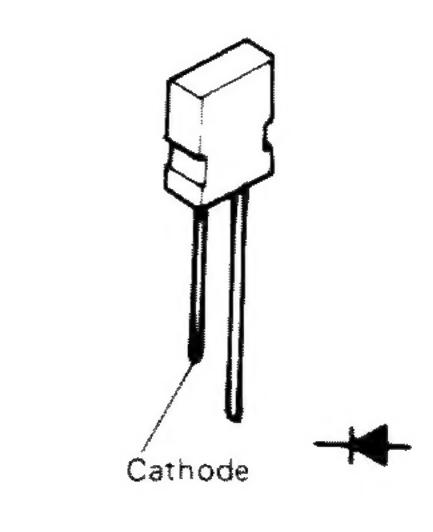
HZS3B-2 HZS9C-2

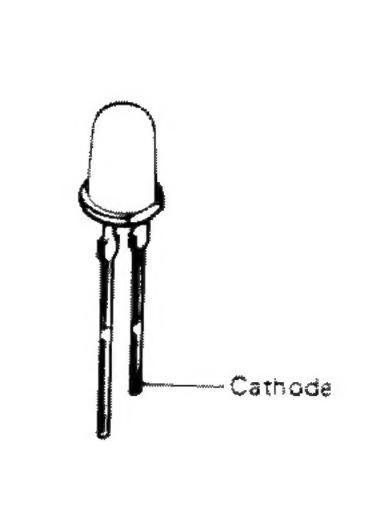
HZS15-2

HZS5C-1

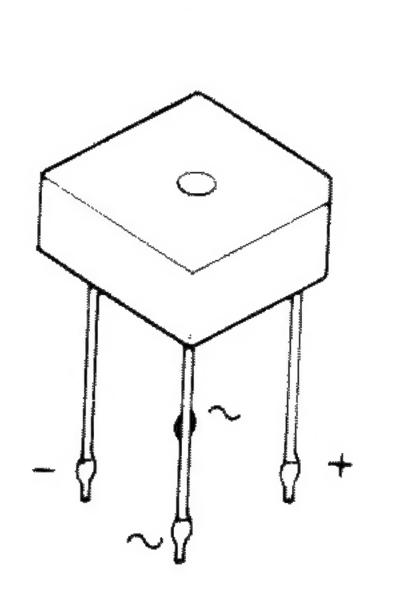
PTH487A01BD222TS



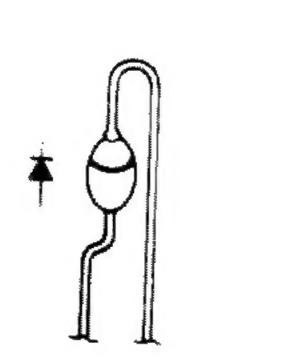


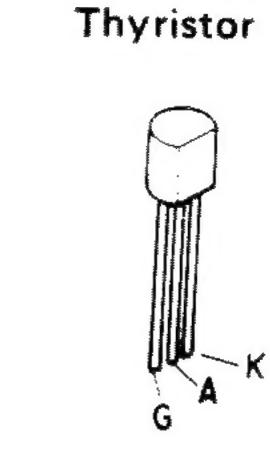


SEL-4310E

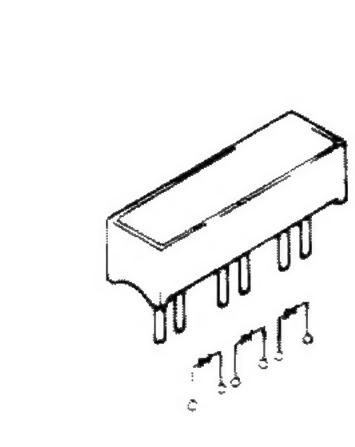


DSA1A2 (TYPE3)





SFOR1A42



LD-701DU(ORANGE)

Cathode (Short) Anode U (Long)

**SEL4414E** 

#### WARNING:

Parts marked with this symbol A have critical characteristics.

Use ONLY replacement parts recommended by the manufacturer.

Ref. No.	Part No.	Part Name	Remarks
C051	2561043711	CF93B2E474K	0.47µF/250V
C052~055	2546114018	CE68W1K822M	<b>8</b> 200μF/80V
C101	2531052004	CK45E2H472P	4700pF/500V
C102	2544258785	CE04W1V471MC (SME)	470µF/35V
C103	2544260935	CE04W1HR47M (SME)	0.47µF/50V
C104	2544256949	CE04W1E101M (SME)	100μF/25V
C105	2544256936	CE04W1E470M (SME)	47µF/25V
C106	2544260980	CE04W1H100M (SME)	10µF/50V
C107,108	2544254925	CE04W1C330M (SME)	33µF/16V
C109	2561035004	CF93A1H184J	0.18µF/50V
C110	2544260980	CE04W1H100M	10μF/50V
C111	2544250929	(SME) CE04W0J101M (SME)	100µF/6.3V
C112	2544260980	CE04W1H100M (SME)	10µF/50V
C151	2554228996	CQ92P2A223J	0.022μF/100V
C153	2531024003	CK45F1H103Z	0.01µF/50V
C201	2554229908	CQ92P2A101J	100pF/100V
C202,203	2544306925	CE04W1H100M (SRE)	10μF/50V
C204,205	2554229940	CQ92P2A221J	220pF/100V
C206	2521085900	CM92C2A270J	27pF/100V
C207	2544260980	CE04W1H100M (SME)	10µF/50V
C210	2543056959	CE04D1H100MBP (SME)	10μF/50V
C211	2521086912	CM92C2A050D	5pF/100V
C212	2554213972	CQ93M1H103J (B)	0.01μF/50V
C213	2521086938	CM92C2A100D	10pF/100V
C214	2554229908	CQ92P2A101J	100pF/100V
C215	2551249907	CQ93M1H471J (B)	470pF/50V
C216	2521086938	CM92C2A100D	10pF/100V
C218,219	2543046901	CE04D2A010MBP	1μF/100V
C220,221	2531052004	CK45E2H472P	4700pF/500V
C222,223	2544263084	CE04W2A100M (SME)	10μF/100V
C306	2544260948	CE04W1H010M (SME)	1μF/50V
C309	2544263990	CE04W2A220 (SME)	22µF/100V
C315,316	2554213927	CQ93M1H152J (B)	1500pF/50V
C317,318	2521085900	CM92C2A270J	27pF/100V
C323	2554213972	CQ93M1H103J (B)	0.01μF/50V
C324	2554228967	CQ92P2A103J	0.01µF/100V
C325	2554213972	CQ93M1H103J (B)	0.01 <sub>μ</sub> F/50V
C326,327	2544263084	CE04W2A100M (SME)	10μF/100V

Ref. No.	Part No.	Part Name	Remarks
C329,330	2561034092	CF93A1H154J	0.15µF/50V
C603	2554213972	CQ93M1H103J (B)	0.01µF/50V
C604~606	2544260980	CE04W1H100M	10μF/50V
		(SME)	
C901	2544260980	CE04W1H100M	10μF/50V
		(SME)	
C902,903	253	CK45F1H103Z	0.01µF/50V
1			
RELAY SW	/ITCH, COIL		
RL101,102	, , , , , , , , , , , , , , , , , , ,	RELAY	
RL201	2149005100	RELAY (BSR-H-12S)	
SWOOT	2129534002	POWER SW	(PUSH) TV-8
SW101,102	2124676017	2P PUSH SWITCH	TUDEN I V-6
344101,102	2124070017	SLIDE SWITCH	
L151,152	2359001004		
LISI,ISZ	2333001004	INDUCTOR	
OTHER PA	RTS		Q'ty
FB301,302	2359006009	BL02RN1-R62	2
	4150298001	CONDENCER	1
ALL		COVER	
F001	2061015074	FUSE 3.15A	1
F003,004	2051036011	FUSE (6.3A)	2
F101,102	2061015016	FUSE (1.25A)	2
	2020022008	FUSE HOLDER	10
	2048101008	2P POWER JACK	1
	2048248000	1P CONNECTOR	<b>*</b>
		BASE	•
	2050190036	3P NH CONNECTOR	2
		BASE	_
	2050233032	3P EH CONNECTOR	2
		BASE	
	2050234031	3P EH SID CONN.	1
	2000201001	BASE	•
	2050190049	4P NH CONNECTOR	2
	200010000	BASE	2
	2050275029	12P EH CON, BASE	1
	2050185038	3P WIRE HOLDER	2
	2050165056	4P WIRE HOLDER	2
	2050243046	4P WIRE HOLDER	1
	4450057007	CORD CLIP	ا ع
			2
000-18 18-0-1000	4450057010 2030226014	1D CONTACT ACCV	 
0044AAl	2030226014	1P CONTACT ASS'Y	1
ADDA	2030226027	1P CONTACT ASS'Y	2
	2034429011	3P CONNECTOR	
	2046460000	12D CONNECTOD	4
	2046160009	12P CONNECTOR	7
	000 40000	CORD	
	2034389025	3P CONNECTOR	
		CORD	
		COMD	

#### KU9155 (for U.S.A.)

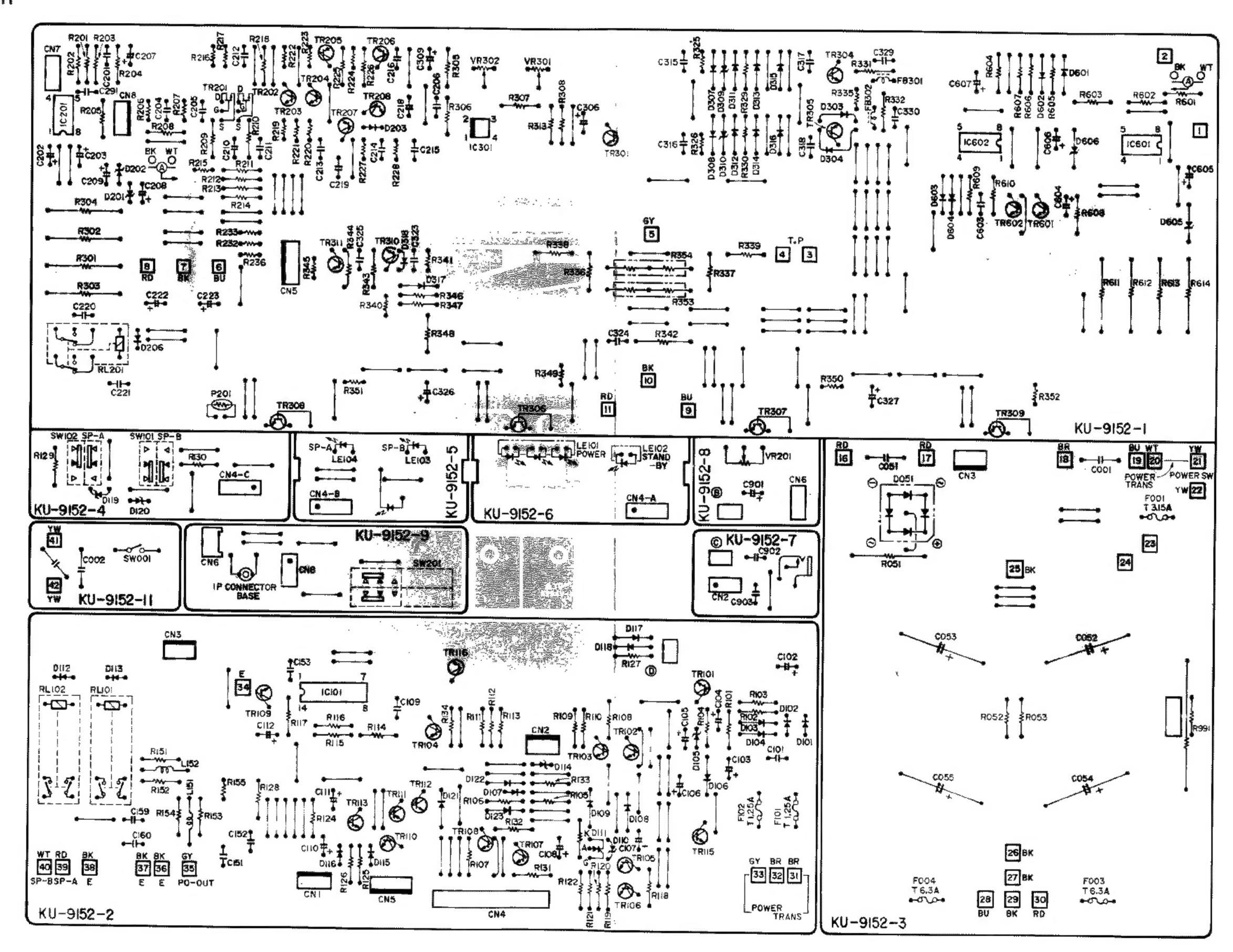
[Same as parts list (for Europe) except the followings]

Ref. No.	Part No.	Part Name	Remarks
F001	2061046014	FUSE 8A Change	UL & CSA
F003,004	2061046014	FUSE 8A Change	UL & CSA
F101,102	2061039047	FUSE 1.25A Change	UL & CSA
RL201	2149013008	RELAY (BSR-H-12S) Change	UL & CSA
C051	2561043711	CF93B2E474K Delete	0.47μF/250V

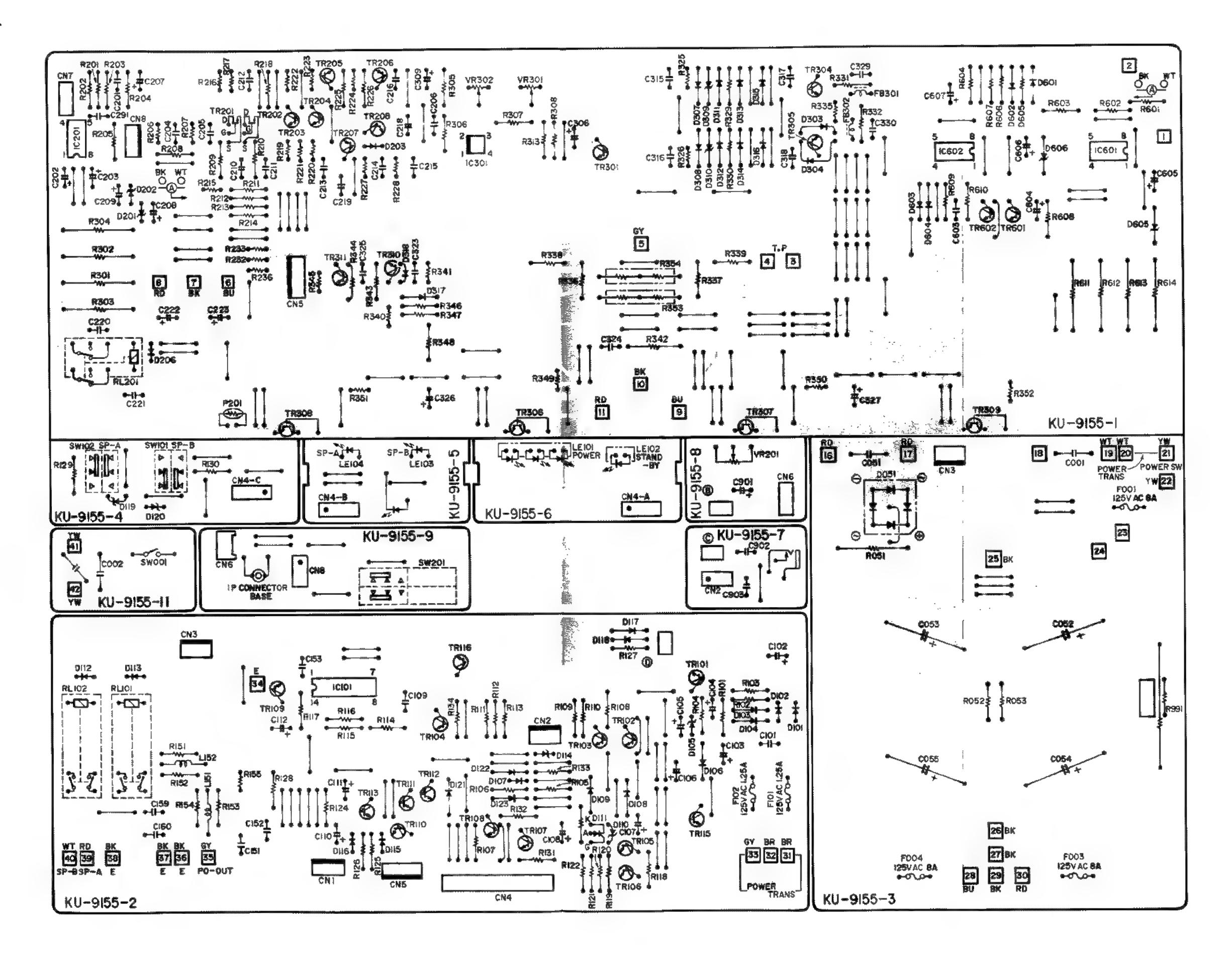
#### KU9155D (for Asia)

[Same as parts list (for Europe) except the followings]

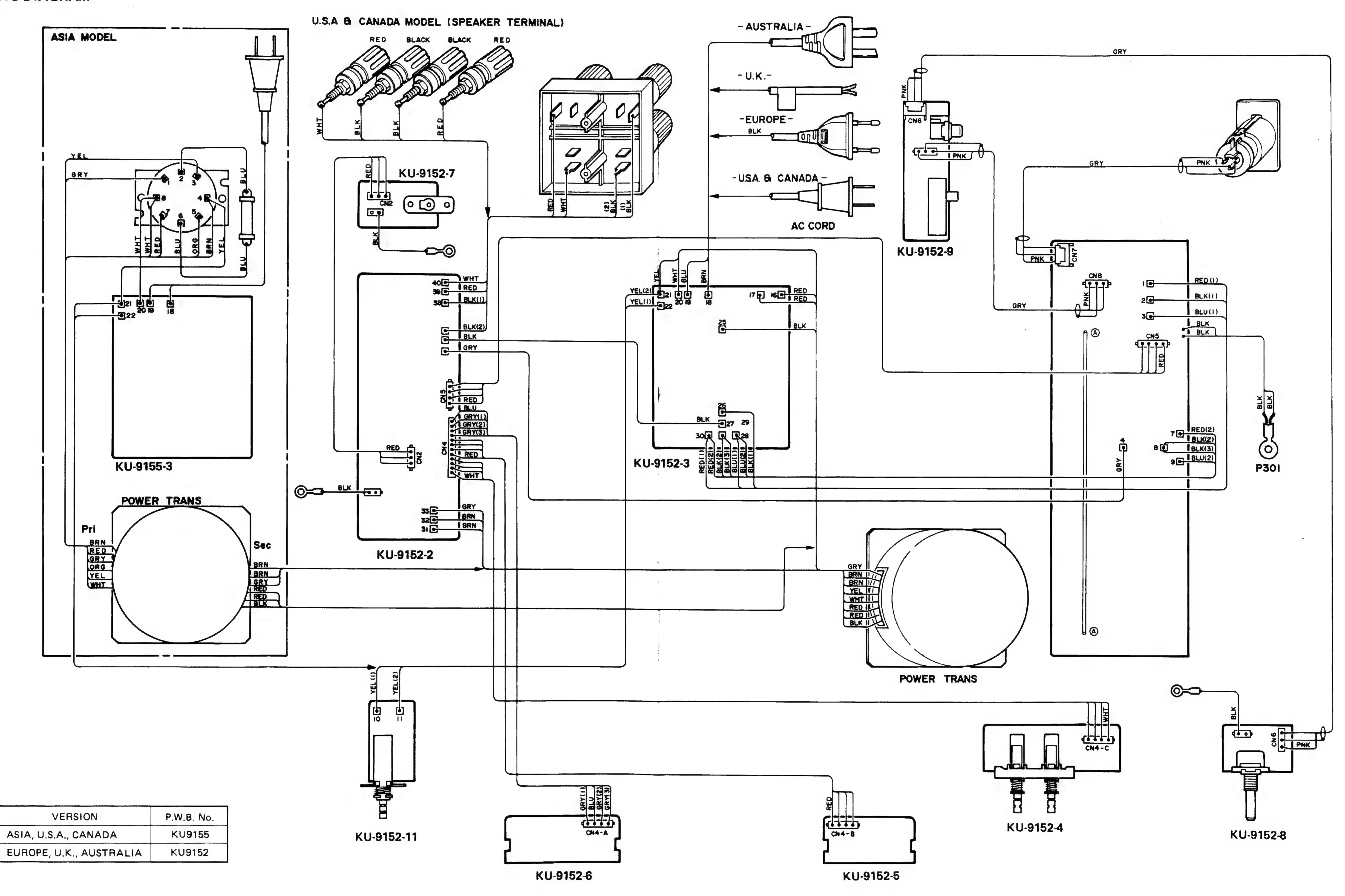
Ref. No.	Part No.	Part Name	Remarks
F001	2061052008	FUSE 8A Change	
F003,004	2061052008	FUSE 8A Change	
F101,102	2061035025	FUSE 1.25A (T)	
		Change	
RL201	2149013008	RELAY	
		(BSR-H-12S UL)	
		Change	
C051	2561043711	CF93B2E474K	0.47µF/250V
		Delete	

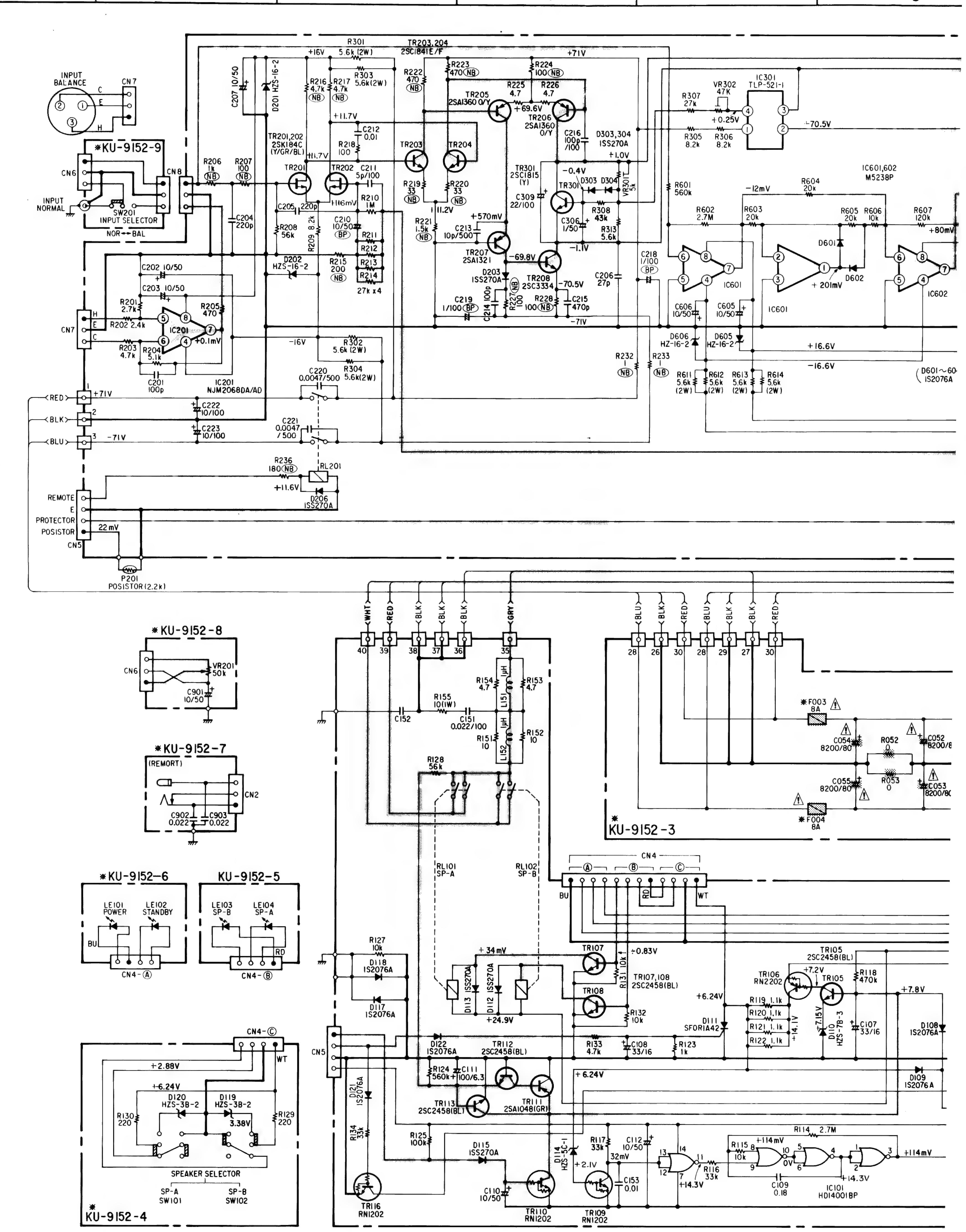


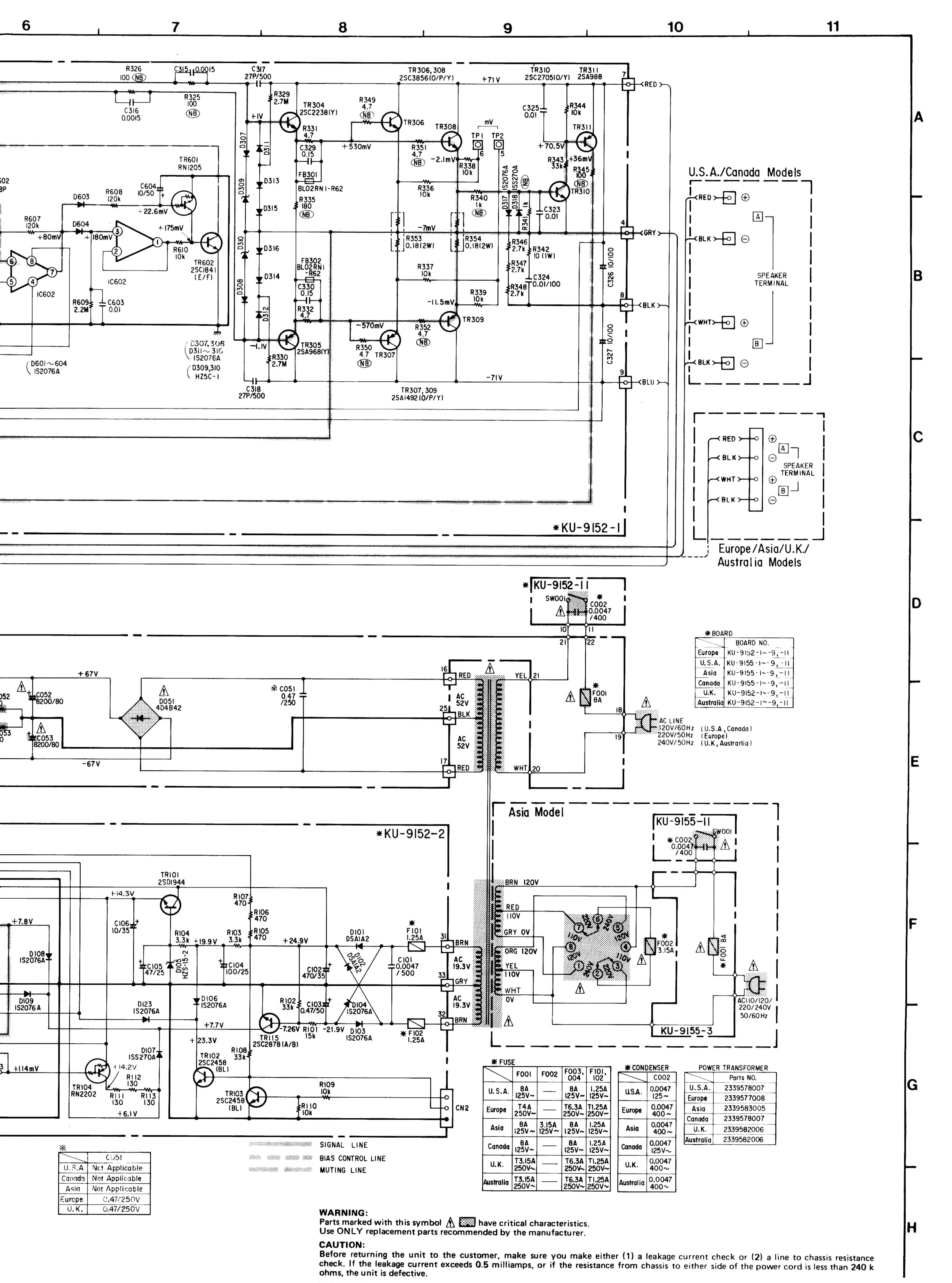
#### **KU-9155 POWER UNIT**



#### WIRING DIAGRAM





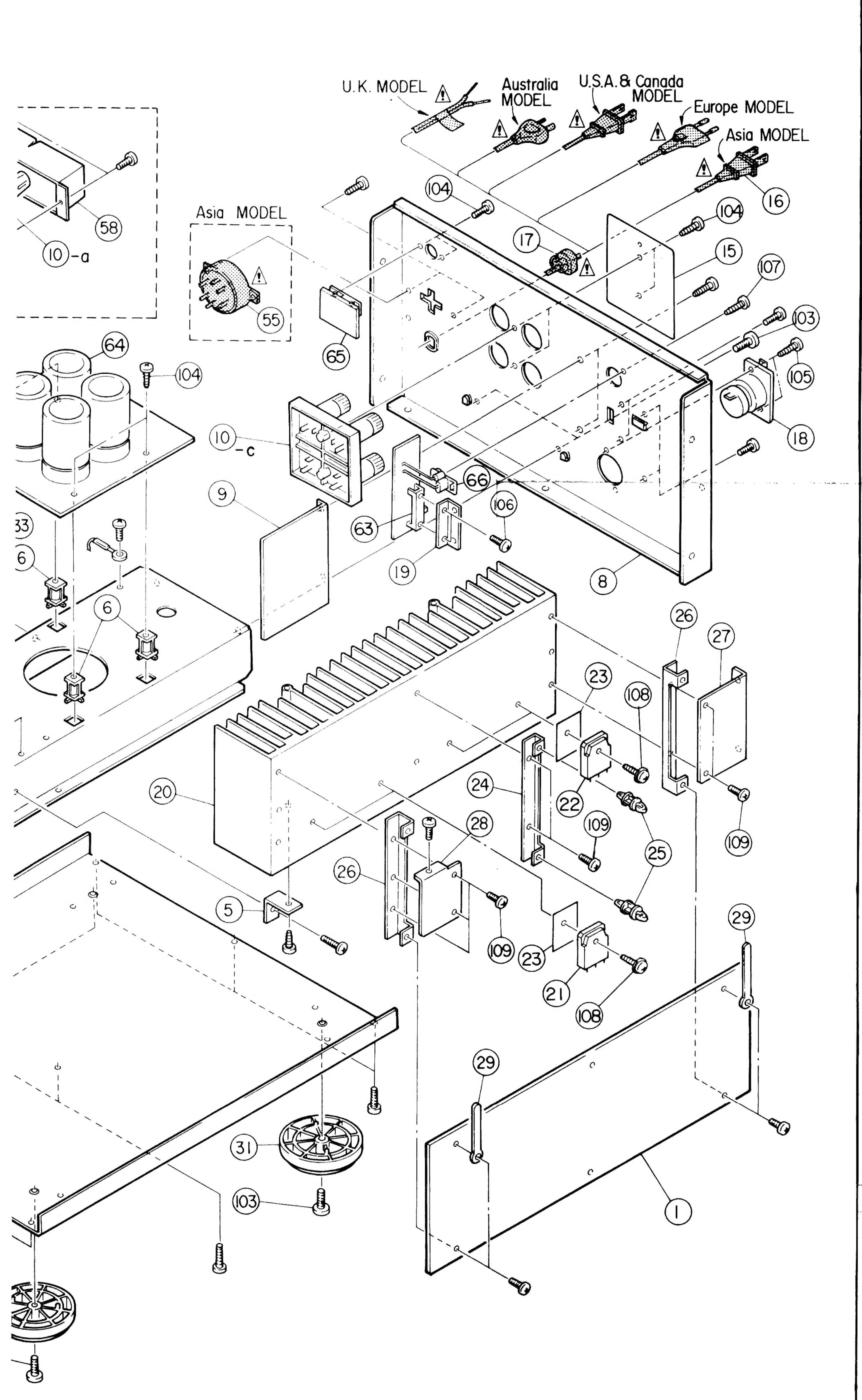


WARNING:

DO NOT return the unit to the customer until the problem is located and corrected.



Parts marked with this symbol A iiii have critical characteristics. Use ONLY replacement parts recommended by the manufacturer.



#### PACKING & ACCESSORIES (not included EXPLODED VIEW)

Ref. No.	Part No.	Part No. Part Name	
201	5049102029	STYLEN PAPER	1
202	5050075051	CABINET COVER 🕊	1
203	5039153004	CUSHION ASS'Y	1
204	5019157046	CARTON CASE	1
205	5058006019	ENVELOPE	1
206	5119251004	INST. MANUAL	1
207	2034442001	REMOTE PLUG CORD	1

ossibly to take	a long period	of time for sup-
-----------------	---------------	------------------

nis-supplying.

PART	S LIST OF	EXPLODED VIEW	
Ref, No.	Part No.	Part Name	Remarks
● *1	KU9152	POWER UNIT	1
<b>②</b> 2	4119053009	FRONT CHASSIS	1
• *3	2034344028	3P CONNECTOR CORD	1
<ul><li>4</li><li>-</li></ul>	4119054202	TRANS CHASSIS	1
<ul><li>5</li></ul>	4129059006	BRACKET	
<b>⊙</b> 6	4159032006	P.C.B HOLDER (T)	4
<ul><li>7</li><li>*°</li></ul>	4159016006 1059127001	P.C.B HOLDER  BACK PANEL	4
<ul><li>*8</li><li>9</li></ul>	4129041001	PWB SUPPORT	1
*10-C	2050273005	4P TERMINAL	
● *11	2090252031	VINYLWIRE	2
<b>⊙ ★</b> 12	2090252015	VINYL WIRE	1
<b>● *</b> 13	2090252028	VINYLWIRE	
<b>⊚ *</b> 14	2034432024	3P CONNECTOR CORD	1
*15	4159014105	PROTECTOR SHEET	1
A*16	2062063009	AC CORD WITH PLUG	1
A*17	4450020005	CORD BUSH (\$K-4)	1
18	2050416008	3P CANNON	1
		CONNECTOR	
<ul><li>19</li><li>30</li></ul>	4129090007	SLIDE SW BRACKET	
② 20	4179034107	POWER RADIATOR	
21	2710221009	2SA1492LB O/P/Y	2
22 23	2730355007 4150234007	2SC3856LB O/P/Y INSULATING SHEET	2
<ul><li>23</li><li>24</li></ul>	4129137119	PWB SUPPORT	4
	412313/113	BRACKET	
② 25	4159033005	P.C.B HOLDER (R)	2
<ul><li>26</li></ul>	4129062006	PWB SUPPORT	2
		BRACKET	
② 27	4129060008	RADIATOR BRACKET	1
		(R)	
② 28	4129144005	RADIATOR BRACKET	
		(F)	
29	4450048016	CORD HOLDER (L50)	2
30	1059100002	BOTTOM COVER	1
31	1049012207	FOOT ASS'Y	4
Δ *32	2339577008	POWER TRANS	1
<ul><li>33</li></ul>	4129143103	SUPPORT BRACKET	2
● *34	2036202016	4P CONNECTOR CORD	1
★35	2090271012	TWIST WIRE	1
★36	2090248029	TWIST WIRE	1
★37	2090252044	VINYLWIRE	
★38     30	2090252002	VINYLWIRE	
39	4450033005	WIRE CLMAP BAND	10
40 41	1139072005 1129041101	PUSH KNOB (L) KNOB	2
42	GEN7025	FRONT PANEL SUB	1
72	GE147025	ASS'Y	
46	1139154101	PUSH KNOB (P) ASS'Y	1
47	1029025010	TOP COVER	1
48	1220095014	SPACER	1
49	4619001001	RUBBER SHEET	3
60	2119056008	V16V20FB503	VR201
61	2124676017	2P PUSH SWITCH	SW101, 102
A 62	2129534002	POWER SWITCH	SW001
63	2124311107	SLIDE SWITCH	INPUT
64	2546114018	CE68W1K822M	C052~055
65	2048101008	2P POWER JACK	REMOTE
66	2048248000	1P PIN JACK	INPUT
			NORMAL
rauserrafter föllsfalls de			
		ODEIMO O BILLTO	
		CREWS & NUTS	A
*101	4737002034	TAPTIGHT SCREW (S)	37
		3x6 BLACK	
102	470700700	M7 NUT (SP)	7
103	4737007000	TAPPING SCREW (S)	20
*104	A727500044	TARTICHT SCREW (P)	
*104	4737500044	TAPTIGHT SCREW (P)	8
105	4737012008	3x8 BLACK TAPPING SCREW (S)	2
103	-1707012000	3x10	
106	4713201024	CROSS-RECESSED	2
_		HEAD MACHINE	
		SCREW	
107	4770064107	FIXING SCREW	1
108	4738007009	3×12 CUP SCREW	4
109		TAPPING SCREW (S)	7

TAPPING SCREW (S)

3x8 BLACK

4737002021

109

#### ADDENDUM LIST

#### WARNING:

Parts marked with this symbol 🛦 📖 have critical characteristics.

Use ONLY replacement parts recommended by the manufacturer.

Daf Ni.	Dare Nama 9. Dasarineta	Part	No.		
Ref. No.	Part Name & Description	U.S.A & Canada	Asia	U.K.	
① 1	POWER UNIT	KU9155	KU9155D	KU9152	
<ul><li>8</li></ul>	BACK PANEL	1059127014	1059127030	1059127001	
10-а	1P TERMINAL (BLACK)	2050443013 (2)	* 400-40-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1		
10-b	1P TERMINAL (RED)	2050443000 (2)			
10-c	4P TERMINAL		2050273005	2050273005	
15	PROTECTOR SHEET	4159039009	4159014105	4159014105	
16	AC CORD (POLARIZED)	2062060002	2006031026		
	AC CORD WITH LABEL			2062024006	
17	CORD BUSH	4450020005	4450028007	4450020005	
32	POWER TRANS	2339578007	2339583005	2339582006	
<b>*</b> 52	FUSE HOLDER		2020013101		
<b>⊙</b> ★ 53	FUSE LABEL		5130654062		
<b>*</b> 54	FUSE 4A		2061035070		
55	VOLTAGE SEL SWITCH		2129555007		
<b>*</b> 56	VOLTAGE LABEL			5130362008 (2)	
<b>● ★</b> 57	BLIND SHEET		_	5139172008	
58	SP. T. PROTECTOR	4159037001	-		
101	TAPTIGHT SCREW(S)	4737002034 (39)	4737002034 (40)	4737002034 (37)	
104	TAPTIGHT SCREW (P)	4737500044 (6)	4737500044 (8)	4737500044 (8)	
110	φ4 SPRING WASHER	4752004004 (4)		_	
<b>* 211</b>	DANGEROUS MARK	5138265009 (2)		_	
	CAUTION SHEET	——————————————————————————————————————		5130364006	
<b>*</b> 213	DAI WARRANTY HOME	5150418107		_	
<b>*</b> 214	CSA LABEL KAWASAKI		<del></del>		
<b>*</b> 215	DCI WARRANTY		<u> </u>		
<b>*</b> 216	PRESET LABEL		5158030008	_	

Note 1. See addendum list above for the parts with asterisk (\*) on the Ref. No. and the other parts not included in the list.

<sup>2. \*</sup> marked not included EXPLODED VIEW OF CHASSIS AND CABINET.

<sup>3.</sup> This list is prepared based on EUROPE BLACK VERSION.